

# **mitsubishi**

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# **A-A1S Module Conversion Adapter**

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User's Manual

**A1ADP-XY**  
**A1ADP-SP**

Thank you for buying the Mitsubishi general-purpose programmable controller MELSEC-A Series

Prior to use, please read both this manual and detailed manual thoroughly and familiarize yourself with the product.



|                           |            |
|---------------------------|------------|
| MODEL                     | A1ADP-U-JE |
| MODEL<br>CODE             | 13JQ00     |
| IB(NA)-0800352-G(0909)MEE |            |

# ● SAFETY PRECAUTIONS ●

(Always read before starting use)

When using this equipment, thoroughly read this manual. Also pay careful attention to safety and handle the module properly.

These precautions apply only to this equipment.

Refer to the user's manual of the CPU module to use for a description of the programmable controller system safety precautions.

These "SAFTY PRECAUTIONS" classify the safety precautions into two categories: "DANGER" and "CAUTION".




**DANGER**

Procedures which may lead to a dangerous condition and cause death or serious injury, if not carried out properly.



**CAUTION**

Procedures which may lead to a dangerous condition and cause superficial to medium injury, or physical damage only, if not carried out properly.

Depending on circumstances, procedures indicated by  **CAUTION** may also be linked to serious results.

In any case, it is important to follow the directions for usage.

Store this manual in a safe place so that you can take it out and read it whenever necessary. Always forward it to the end user.

## [DESIGN PRECAUTIONS]



**DANGER**

- When using the A series module to which the A-A1S module conversion adapter has been installed on the right side, attach a dustproof cover to the module.  
If no dustproof cover is attached, foreign matter will enter the module, resulting in a failure. Furthermore, internal parts of the module may be flied in the short circuit test or when an overcurrent or overvoltage is accidentally applied to the external I/O section.
- Before installing the AnS series module to the A1ADP, attach the dustproof cover to the module.  
If no dustproof cover is attached, foreign matter will enter the module, resulting in a failure. Furthermore, internal parts of the module may be flied in the short circuit test or when an overcurrent or overvoltage is accidentally applied to the external I/O section.

## [INSTALLATION PRECAUTIONS]

### CAUTION

- Use the programmable controller in the environment given in the general specifications section of the User's manual for CPU module being used. Using the programmable controller outside the range of the general specifications may result in electric shock, fire or erroneous operation or may damage or degrade the product.
- Fully insert adapter fixing projections on the lower part of an adapter into fixing holes on the base unit, then tighten the adapter mounting screw within the specified torque.  
If the adapter is not correctly installed or no screw is tightened, it causes malfunctions, a failure, or drop.  
Tightening the screw excessively may damage the screw and/or adapter, resulting in a drop of the adapter and installed module, short circuit, or malfunctions.
- Be sure to shut off all phases of the external supply power used by the system before installing or removing the adapter.  
Failure to do so may damage the products.
- Do not directly touch the conductive part or electronic components of an adapter.  
Doing so may cause malfunctions or a failure of the adapter.

## [WIRING PRECAUTIONS]

### DANGER

- Be sure to shut off all phases of the external supply power used by the system before wiring.  
Failure to do so may result in an electric shock or damage of the product.
- Before energizing and operating the system after wiring, be sure to attach the terminal cover supplied with the product.  
Failure to do so may cause an electric shock.

### CAUTION

- Wire the module correctly after confirming the rated voltage and terminal layout.  
Connecting a power supply of a different voltage rating or incorrect wiring may cause a fire or failure.
- Do not connect multiple power supply modules to one module in parallel.  
The power supply modules may be heated, resulting in a fire or failure.
- Press, crimp or properly solder the connector for external connection with the specified tool.  
Incomplete connection may cause a short circuit, fire or malfunctions.

## **[WIRING PRECAUTIONS]**

### **CAUTION**

- Tighten terminal screws within the specified torque range. If the screw is too loose, it may cause a short circuit, fire or malfunctions.  
If too tight, it may damage the screw and/or the module, resulting in a short circuit or malfunctions.
- Carefully prevent foreign matter such as dust or wire chips from entering the module.  
Failure to do so may cause a fire, failure or malfunctions.

## **[STARTING AND MAINTENANCE PRECAUTIONS]**

### **DANGER**

- Be sure to shut off all phases of the external supply power used by the system before cleaning or retightening the terminal screws, module mounting screw, or adapter mounting screw.  
Failure to do so may result in an electric shock.  
If they are too loose, it may cause a short circuit or malfunctions.  
If too tight, it may cause damage to the screws and/or module, resulting in a drop of the adapter and installed module, short circuit, or malfunctions.

### **CAUTION**

- Do not disassemble or modify each of adapters.  
Doing so may cause a failure, malfunctions, personal injuries, and/or a fire.
- When using a wireless communication device such as a mobile phone, keep a distance of 25cm (9.84inch) or more from the programmable controller in all directions.  
Failure to do so may cause malfunctions.
- Be sure to shut off all phases of the external supply power used by the system before installing or removing the adapter.  
Failure to do so may result in a failure or malfunctions of the adapter and installed module.
- Before handling adapters, touch a grounded metal object to discharge the static electricity from the human body.  
Failure to do so may cause a failure or malfunctions of the installed module.

## **[DISPOSAL PRECAUTIONS]**

### **CAUTION**

- When disposing of this product, treat it as industrial waste.

## Revisions

\* The manual number is noted at the lower right of the top cover.

| Print Date | *Manual Number   | Revision  |
|------------|------------------|---|
| Jun., 2006 | IB(NA)-0800352-A | First printing  |
| May, 2007  | IB(NA)-0800352-B | Correction<br>Section 2.3, Chapter 7, Section 8.2   |
| Oct., 2007 | IB(NA)-0800352-C | Correction<br>Chapter 7, Section 8.2  |
| Jul., 2008 | IB(NA)-0800352-D | Correction<br>Chapter 7   |
| Nov., 2008 | IB(NA)-0800352-E | Correction<br>Section 2.1, 2.2, 8.2   |
| Feb., 2009 | IB(NA)-0800352-F | Correction<br>Section 1.1, 1.3, 2.1.3, 2.3, Chapter 7,<br>Section 8.1, 8.2<br>Addition<br>Section 2.1.4 |
| Sep., 2009 | IB(NA)-0800352-G | Correction<br>Chapter 7   |
|            |                  |   |

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## GENERIC TERMS AND ABBREVIATIONS

Unless otherwise specified, this manual uses the following generic terms and abbreviations to explain the A-A1S module conversion adapter.

| Generic term/abbreviation | Description   |
|---------------------------|---|
| A1ADP-XY                  | Abbreviation for the A-A1S module conversion adapter of the A1ADP-XY type.                        |
| A1ADP-SP                  | Abbreviation for the A-A1S module conversion adapter of the A1ADP-SP type.                        |
| A1ADP                     | Generic term for the A1ADP-XY and A1ADP-SP.   |
| A1ADP + AnS series module | Abbreviation when the AnS series I/O module or special function module is installed to the A1ADP. |

### Conformation to the EMC Directive and Low Voltage Instruction

#### (1) For programmable controller system

When complying with EMC Directives and Low-Voltage Directives by assembling a Mitsubishi programmable controller compatible with EMC Directive and Low-Voltage Directives into the user product, refer to "EMC Directives and Low-Voltage Directives" in the User's Manual for the CPU module being used. The CE mark, indicating compliance with the EMC and Low Voltage Directives, is printed on the rating plate of the programmable controller.

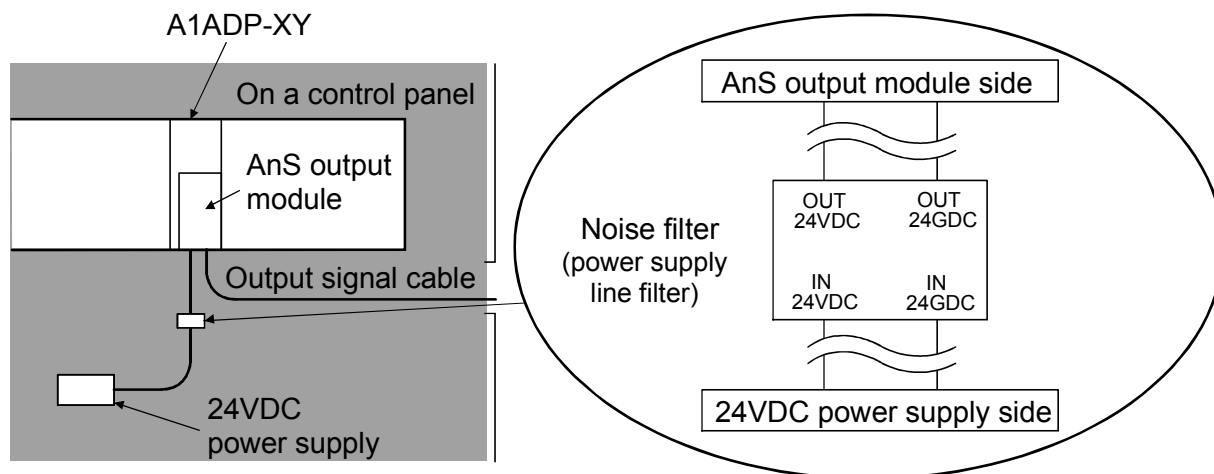
#### (2) For the product

For the compliance of this product with the EMC and Low Voltage Directives, installing a noise filter (power supply line filter) as the following is required.

(a) When using the A1ADP-XY with an AnS series output module, attach any of the following noise filters (power supply line filters) to reduce conductive noise of 24VDC external supply power cable.

|                         |            |            |            |               |
|-------------------------|------------|------------|------------|---------------|
| Noise filter model name | ZHC2203-11 | ZHC2206-11 | ZHC2210-11 | MBS4830       |
| Manufacturer            | TDK        |            |            | DENSEI-LAMBDA |
| Rated current           | 3A         | 6A         | 10A        | 30A           |
| Rated voltage           | 250V       |            |            | 48V           |

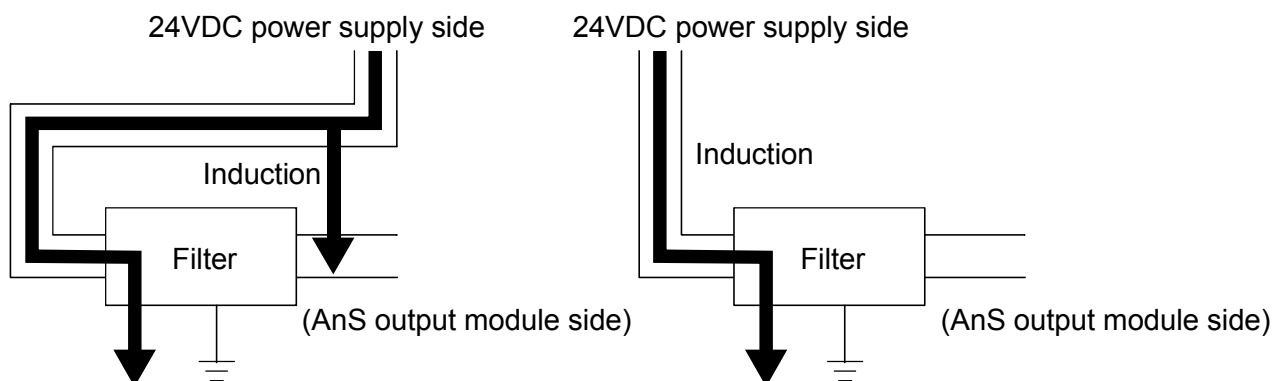
- (b) Referring to the following, attach a noise filter (power supply line filter) to the 24VDC external supply power cable connected to the AnS series output module.



- (c) The following describes the precautions for attaching a noise filter.

- 1) Do not bundle the wires on the input side and output side of the noise filter.

When bundled, the input side noise will be induced into the output side wires from which the noise was filtered.



- 1) The noise will be included when the input and output wires are bundled.
- 2) Separate and lay the input and output wires.

- 2) Earth the noise filter earthing terminal to the control cabinet with the shortest wire possible (approx. 10cm (3.94 in.)).

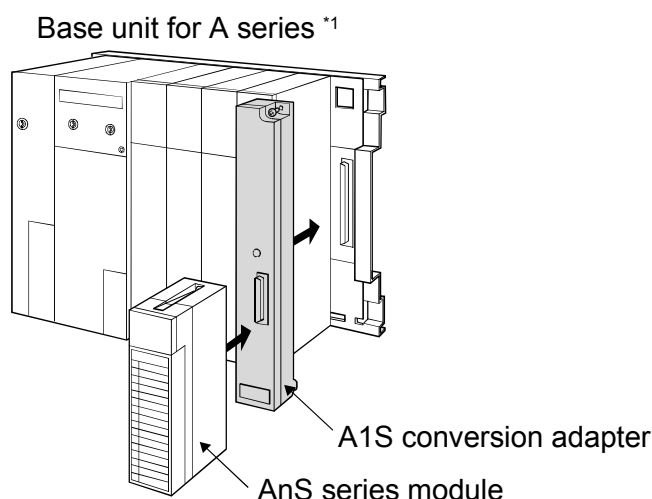


# 1. OVERVIEW

## 1.1 Overview

This manual describes specifications, system equipment, part names, loading, and installation of the A-A1S module conversion adapters of the A1ADP-XY type and A1ADP-SP type.

The A1ADP is an adapter module used to install the AnS series I/O modules and special function modules to the base unit for A/QnA (large type) series.



\*1: For details of the system configuration that enables the installing the A1ADP to A series base units, refer to Chapter 2.

A1ADP-XY.....For the AnS series I/O modules

A1ADP-SP.....For the AnS series special function modules

### POINT

When modules are installed in either of the following combinations, the operation is not guaranteed.

- Combination of the A1ADP-XY with the AnS series special function modules
- Combination of the A1ADP-SP with the AnS series I/O modules

However, for the following models, the combination of the module type configured in the I/O assignment setting and the A1ADP model that can be combined differs. Pay attention when selecting the A1ADP.

| Model     | Type           | Usable A1ADP model |
|-----------|----------------|--------------------|
| A1SI61    | Special module | A1ADP-XY           |
| A1SJ51T64 | Output module  | A1ADP-SP           |
| A1SS91    | Output module  | A1ADP-SP           |

## 1.2 Supplied Parts

The parts enclosed with the A1ADP are listed below.

| Product                                 | Type                 | Quantity | Remarks  |
|---|----------------------|----------|--|
| A-A1S module conversion adapter         | A1ADP-XY or A1ADP-SP | 1        | —  |
| The dustproof cover for the A1ADP-XY/SP | —                    | 1        | "A1ADP" is shown on the backside of the dustproof cover. |
| This manual                             | —                    | 1        | —  |

For references of the dustproof cover, see the back cover of this manual.

## 1.3 Related Parts (Sold Separately)

When the A (large type) module has been installed on the right of a slot to which the A1ADP has been loaded, attach the following dustproof cover to the A (large type) series module side.

The following dustproof cover is not an accessory. Please purchase it separately.

| Product name                  | Manufacturer                                 | Quantity | Remarks  |
|-------------------------------|--|----------|--|
| A55B, 58B I/O dustproof cover | Mitsubishi Electric System Service Co., Ltd. | 1        | Same dustproof cover included in the A52B, A55B, and A58B. |

For references of the dustproof cover, see the back cover of this manual.

## 2. SYSTEM CONFIGURATION

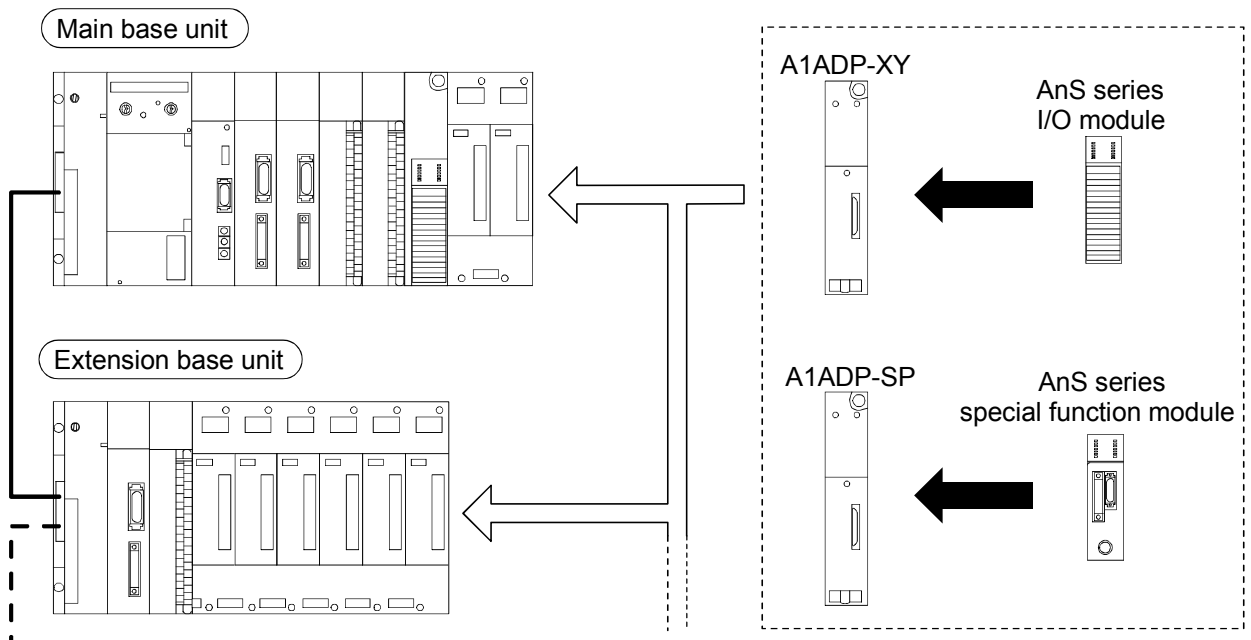
The A1ADP can be installed to the following base units.

- A/QnA (large type) series main base units or extension base units
- A series extension base units installed to Q series base units

This section describes the system configuration, available base units, available CPU modules, and precautions for the A1ADP.

### 2.1 For installing the A1ADP to an A/QnA (large type) series main base unit or extension base unit

#### 2.1.1 System Configuration



### 2.1.2 Available Base Units List

The following table shows the base units to which the A1ADP can be installed. Up to three A1ADPs can be installed to one base unit.

| Main base unit |                                | Extension base unit |                                |
|----------------|--------------------------------|---------------------|--------------------------------|
| Type           | Number of installable adapters | Type                | Number of installable adapters |
| A38B           | 3                              | A68B                | 3                              |
| A38B-E         | 3                              | A68B-UL             | 3                              |
| A38B-UL        | 3                              | A65B                | 3                              |
| A38HB          | 3                              | A65B-UL             | 3                              |
| A38HBEU        | 3                              | A62B                | 2                              |
| A35B           | 3                              | A58B                | 3                              |
| A35B-E         | 3                              | A58B-UL             | 3                              |
| A35B-UL        | 3                              | A55B                | 3                              |
| A32B           | 2                              | A55B-UL             | 3                              |
| A32B-E         | 2                              | A52B                | 2                              |
| A32B-UL        | 2                              | A68RB               | 3                              |
| A32B-S1        | 2                              |                     |                                |
| A37RHB         | 3                              |                     |                                |
| A33RB          | 2                              |                     |                                |
| A32RB          | 1                              |                     |                                |

### 2.1.3 Available CPU modules list

The following table shows the CPU modules available for the A1ADP use.

| Available CPU module <sup>*1</sup> |              |              |              |
|------------------------------------|--------------|--------------|--------------|
| A1NCPUR21                          | A1NCPUP21    | A1NCPUR21    | A2NCPUR21    |
| A2NCPUR21                          | A2NCPUP21    | A2NCPUR21    | A2NCPUP21-S1 |
| A2NCPUR21-S1                       | A3NCPUR21    | A3NCPUP21    | A3NCPUR21    |
| A2ACPU                             | A2ACPUP21    | A2ACPUR21    | A2ACPU-S1    |
| A2ACPUP21-S1                       | A2ACPUR21-S1 | A3ACPU       | A3ACPUP21    |
| A3ACPUR21                          | A2UCPU       | A2UCPU-S1    | A3UCPU       |
| A4UCPU                             | A1NCPUP21-S3 | A2NCPUP21-S3 | A2NCPUP21-S4 |
| A3NCPUP21-S3                       | A2ACPUP21-S3 | A2ACPUP21-S4 | A3ACPUP21-S3 |
| Q2ACPU                             | Q2ACPU-S1    | Q3ACPU       | Q4ACPU       |
| Q4ARCPU                            |              |              |              |

\*1: The relevant modules are the CPU modules that had been discontinued at the end of September, 2006 (at the end of September, 2008 for the models that were kept produced for more 2 years as a spare part).

The CPU modules that were discontinued before the end of September, 2006 and not mentioned in the above table (such as the AnCPU and A3HCPU) are unavailable.

#### 2.1.4 List of available remote I/O stations

The following table shows the link modules for MELSECNET and MELSECNET/10 remote I/O station for which the A1ADP can be used.

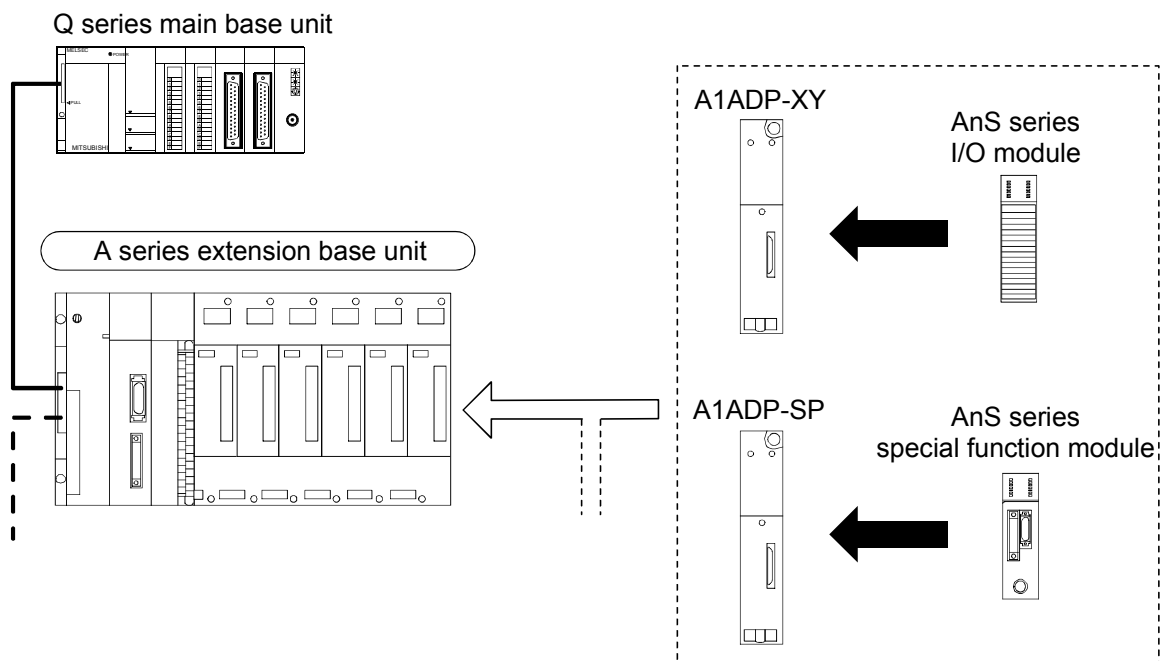
| Available modules <sup>*1</sup> |            |           |           |
|---------------------------------|------------|-----------|-----------|
| AJ72P25                         | AJ72P25-S3 | AJ72R25   | AJ72T25B  |
| AJ72LP25                        | AJ72LP25G  | AJ72LR25  | AJ72BR15  |
| AJ72QLP25                       | AJ72QLP25G | AJ72QLR25 | AJ72QBR15 |

\*1: There are restrictions on the available modules. For details, refer to the following manuals.

- Type MELSECNET, MELSECNET/B Data Link System Reference Manual
- Type MELSECNET/10 Network System (Remote I/O network) Reference Manual
- For QnA/Q4AR MELSECNET/10 Network System Reference Manual
- User's manual for the relevant module

## 2.2 For installing the A1ADP to the A series extension base unit connected to a Q series base unit

### 2.2.1 System Configuration



### 2.2.2 Available Base Units List

The following table shows the base units to which the A1ADP can be installed. Up to three A1ADPs can be installed to one base unit.

| Extension base unit |                                | Remarks  |
|---------------------|--------------------------------|--|
| Type                | Number of installable adapters |  |
| A68B                | 3                              | Install the QA6ADP to an extension main base unit. However, the modules that can be installed to have restrictions. For details, refer to the QA6ADP QA Conversion Adapter Module User's Manual. |
| A68B-UL             | 3                              |  |
| A65B                | 3                              |  |
| A65B-UL             | 3                              |  |
| A62B                | 2                              |  |
| A58B                | 3                              |  |
| A58B-UL             | 3                              |  |
| A55B                | 3                              |  |
| A55B-UL             | 3                              |  |
| A52B                | 2                              |  |
| QA68B               | 3                              | The modules that can be installed to have restrictions. For details, refer to the QA65B/QA68B Extension Base Unit User's Manual.   |
| QA65B               | 3                              |  |

### 2.2.3 Available CPU modules list

The following table shows the CPU modules available for the A1ADP use.

| Available CPU module |         |         |         |         |
|----------------------|---------|---------|---------|---------|
| Q02CPU               | Q02HCPU | Q06HCPU | Q12HCPU | Q25HCPU |

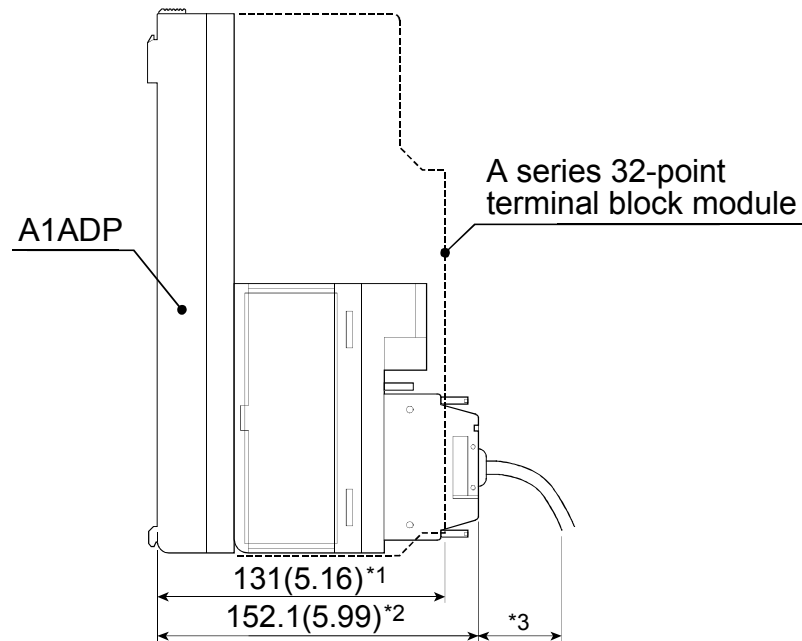
## 2.3 Precautions for Use

- (1) When replacing the A (large type) series module by the A1ADP + AnS series module, the internal current consumption may increase.  
At replacement, make sure to check the 5VDC internal current consumption of the modules before and after replacement. If the 5VDC internal current consumption increases after the replacement, confirm that the current consumption of the modules used does not exceed the rated output current of the power supply module used.
- (2) When the A1ADP + AnS series module is installed to an extension base unit not needing a power supply module (A52B, A55B, or A58B) in the case that the increase in 5VDC internal current consumption may cause, voltage drop increases in the extension cable. Therefore, recalculating the receiving end voltage is required.  
(For confirmation method, refer to the "Application standards of Extension Base Units" (A52B, A55B, or A58B) in the CPU module's User's Manual.)
- (3) The A (large type) series module differs from the A1ADP+AnS series module in specifications. For the equivalent products and specifications comparison, refer to Chapter 8 and the Transition from MELSEC-A/QnA Large Type Series to AnS/Q2AS Small Type Series Handbook (L(NA)08064ENG).

- (4) AnS series 32-point I/O modules and special function modules are connector type. Accordingly, when installing them to an A series base unit using the A1ADP, its depth is deeper than when installing an A series 32-point module.

When using the AnS series 32-point I/O modules or special function modules, confirm that there is enough room.

**Example** When replacing the A series 32-point module



Unit: mm (inch)

\*1: Depth dimension of the A series 32-point terminal block module

\*2: Depth dimension of the A1ADP + AnS series 32-point connector type module

\*3: Consider the bending radius of a connector cable.

- (5) The AnS series output module with a fuse detects fuse blown if external supply power has not been input.

Use special relay M9084 or SM1084 (error check) at power-on with the external supply power OFF so that fuse blown may not be detected.

- (6) When mounting the A1ADP-XY+AnS series output module with a fuse on the MELSECNET/II remote I/O station (AJ72P25 or AJ72R25), the CPU module of the master station may detect "UNIT VERIFY ERR."

However, note that the AJ72P25 or AJ72R25 whose software version is "P" or later is used, "UNIT VEFIRY ERR." will not be detected.

Turning ON the power supply of the master station after turning ON the power supply of the remote I/O station and the 24VDC external power supply enables to avoid "UNIT VEFIRY ERR."

Also, if the fuse blown is detected, cancel the error by the reset operation of the CPU module used.



## 3. SPECIFICATIONS

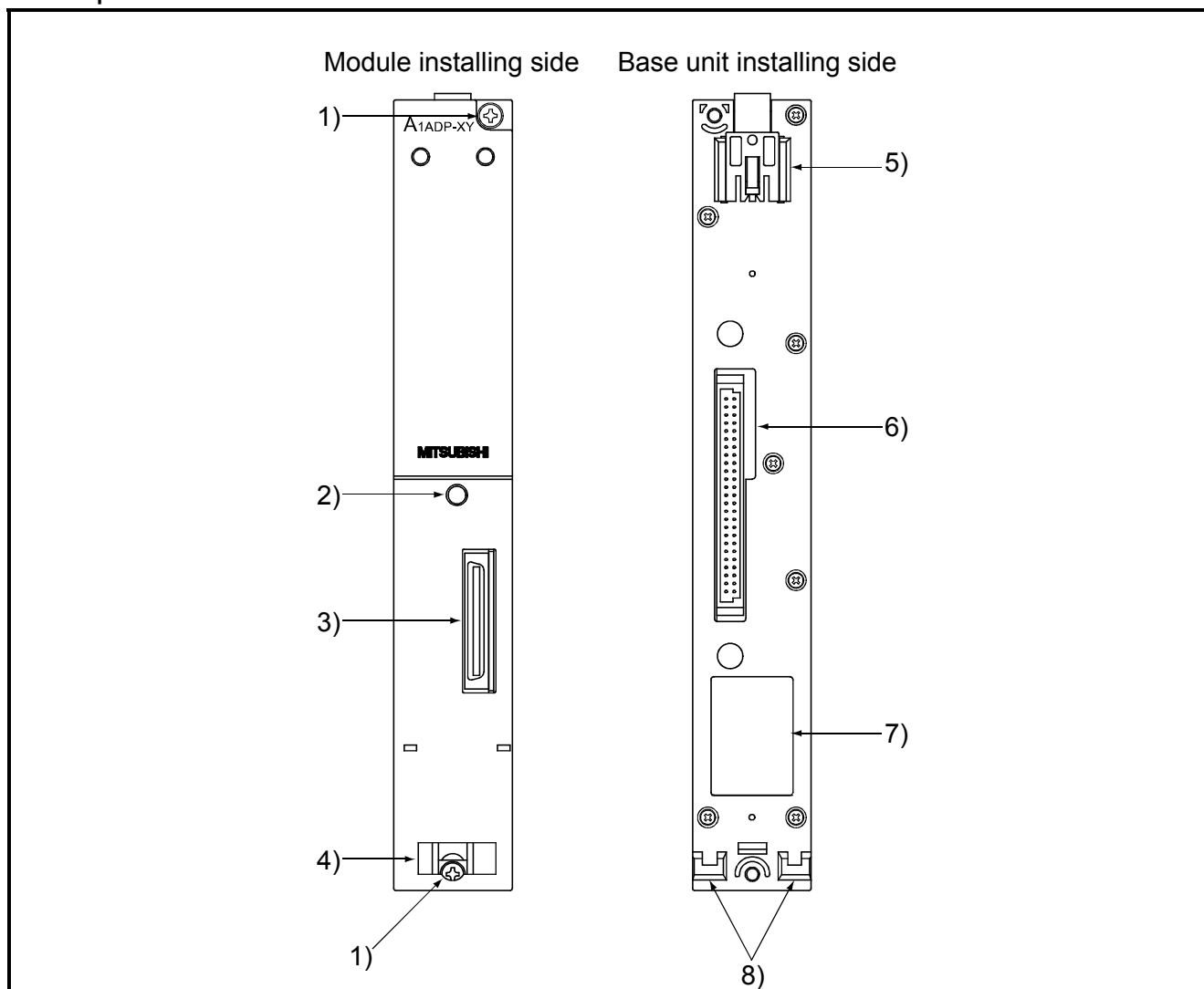
### 3.1 Performance Specifications

The performance specifications of the A1ADP are shown below.

| Specification                     | A1ADP-XY   | A1ADP-SP |
|-----------------------------------|--|----------|
| 5VDC internal current consumption | 3.4mA  | 0mA      |
| External dimensions               | 250(H)×37.5(W)×35.5(D)<br>(9.84×1.48×1.40) mm (inch) |          |
| Weight                            | 0.20kg   |          |

## 4. PARTS NAMES

Each part name of the A1ADP is shown in the table below.



| No. | Name   | Usage   |
|-----|--|---|
| 1)  | Adapter mounting screw                         | A screw for installing the A1ADP to a base unit (Make sure to tighten the screw).                       |
| 2)  | Module mounting screw hole                     | A screw hole for fixing the A1ADP to AnS series module (for M4 screw) (Make sure to tighten the screw). |
| 3)  | Module connector                               | A connector for connecting the A1ADP to AnS series module.  |
| 4)  | Projection mounting hole for fixing A1S module | A hole for attaching the module fixing projection on AnS series module.                                 |
| 5)  | Adapter fixing hook                            | A hook for fixing it to the module fixing hole on a base unit.  |
| 6)  | Base connector                                 | A connector for connecting the A1ADP to a base unit.  |
| 7)  | Rating plate                                   | A seal such as the product name is described.   |
| 8)  | Adapter fixing projection                      | A projection for fixing it to the module fixing hole on a base unit.                                    |

## 5. LOADING AND INSTALLATION

### 5.1 Precautions when Handling

The following is an explanation of handling precautions of the A1ADP.

- (1) Since the adapter case is made of plastic, do not drop it or subject it to mechanical impact to it.
- (2) Execute tightening of installation screws within the range indicated below.

| Screw location                                     | Tightening torque range |
|--|-------------------------|
| Module installation screw of AnS series (M4 screw) | 78 to 118N•cm           |
| Adapter mounting screw (M4 screw)                  | 78 to 118N•cm           |

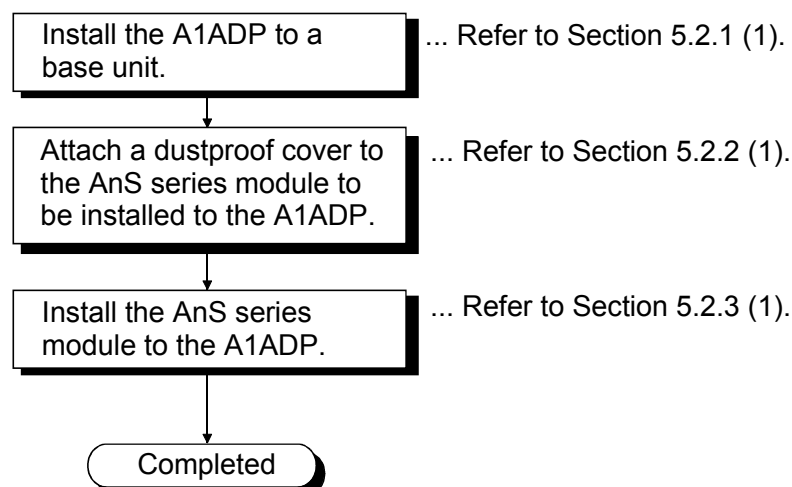
- (3) To correctly install the adapter module to the base unit, insert the adapter fixing projections provided at the bottom of the module in the module mounting holes in the base unit. And then, secure the module by tightening the adapter mounting screw.

To remove the module, remove the adapter mounting screw first. And then, pull out the module so that the adapter fixing projections are removed from the holes in the base unit.

### 5.2 Installation/Removal Procedures of the A1ADP + AnS Series Module

This section describes the procedures for installing/removing the A1ADP to/from a base unit and AnS series module.

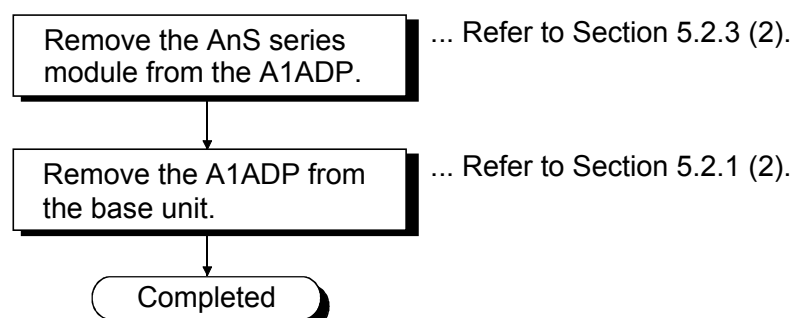
#### (1) Installation procedure



#### POINT

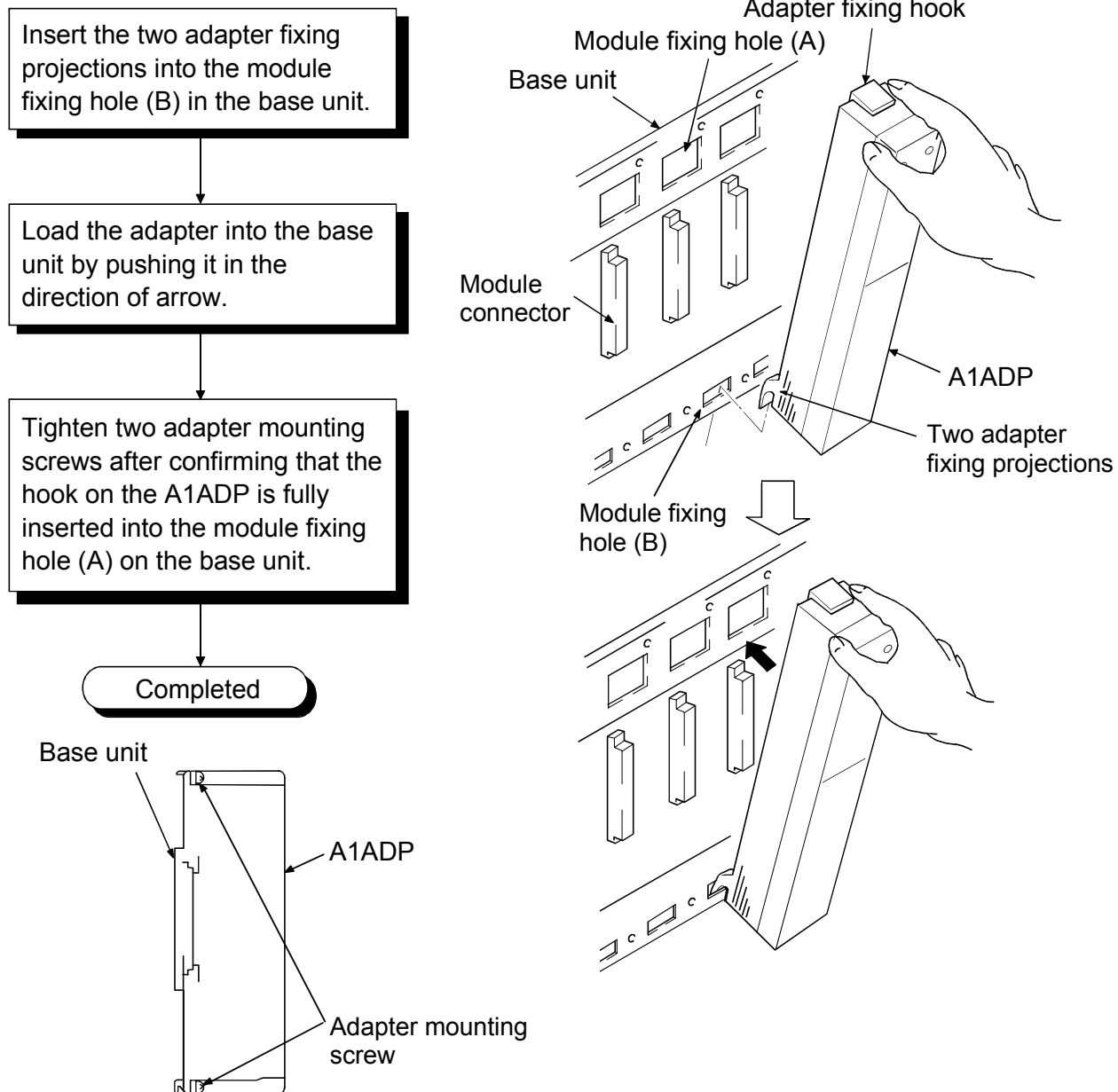
Note when installing the AnS series module before tightening an adapter mounting screw of the A1ADP, the tightening cannot be done.

#### (2) Removal procedure



## 5.2.1 Installing/removing the A1ADP

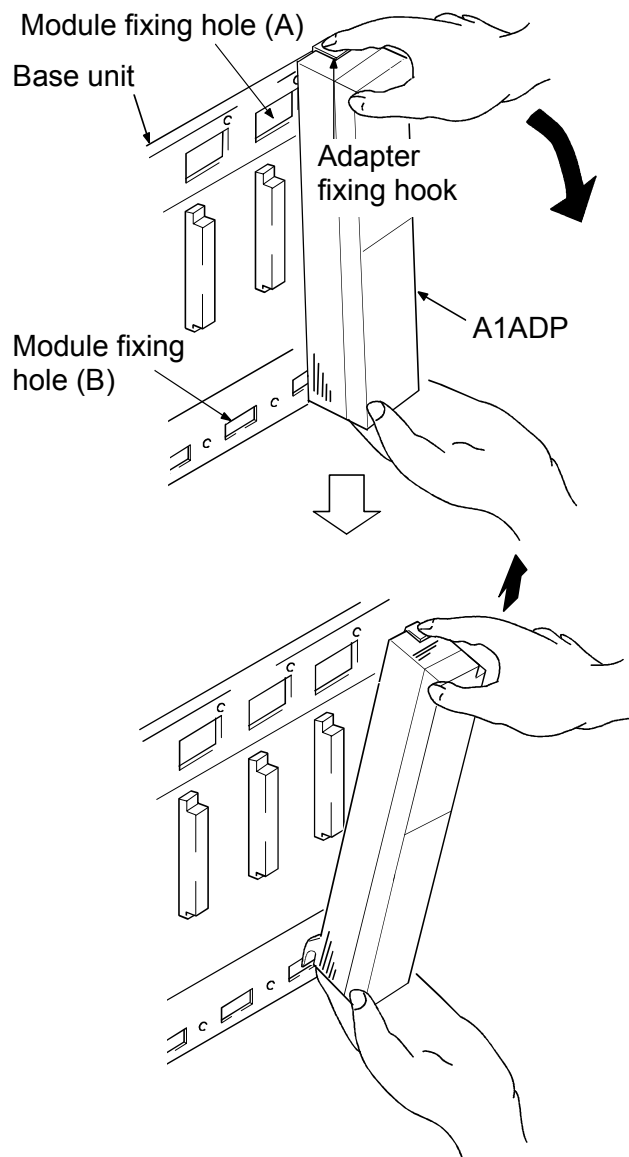
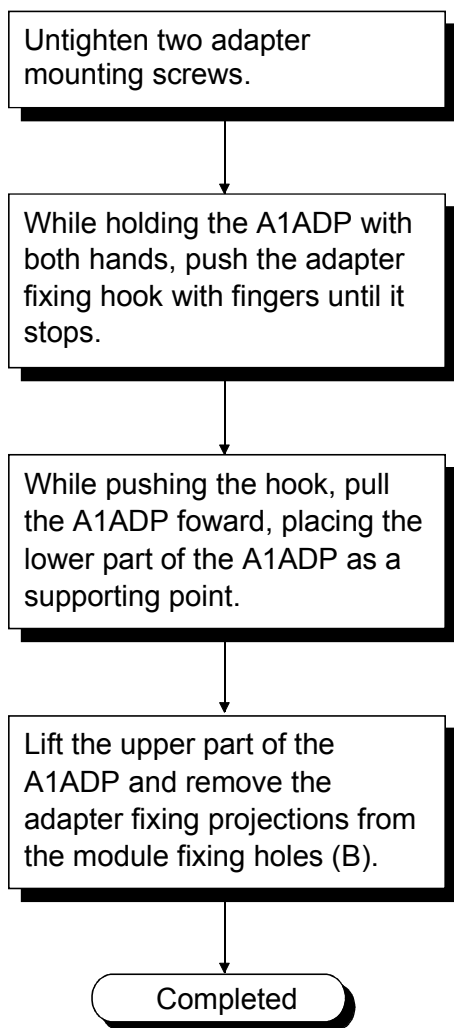
### (1) A1ADP installation



#### POINT

For fixing the A1ADP, insert the adapter fixing projections into the module fixing holes (B). Forceful installation may damage the module connector and/or A1ADP.

## (2) A1ADP removal



### POINT

Before removing the A1ADP, make sure to untighten two adapter mounting screws. Then, remove the adapter fixing hook from a module fixing hole (A), and also the adapter fixing projections from a module fixing holes (B). Forcefully removing the adapter may damage the adapter fixing hook and/or the adapter fixing projections.

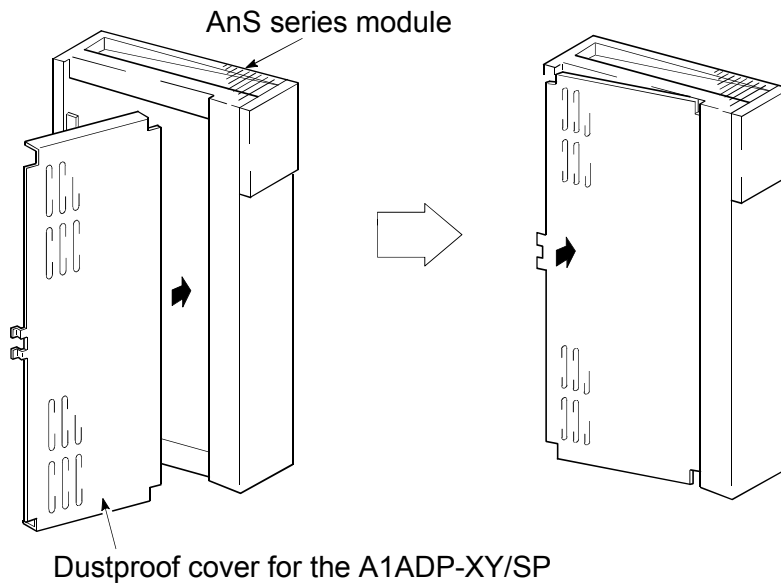
### 5.2.2 Installing/removing the dustproof cover

Before installing the AnS series module to the A1ADP, attach the dustproof cover for the A1ADP-XY/SP, included with the A1ADP, to the module.

If no dustproof cover is attached, foreign matter will enter the module, resulting in a failure. Furthermore, internal parts of the module may be fried in the short circuit test or when an overcurrent or overvoltage is accidentally applied to the external I/O section.

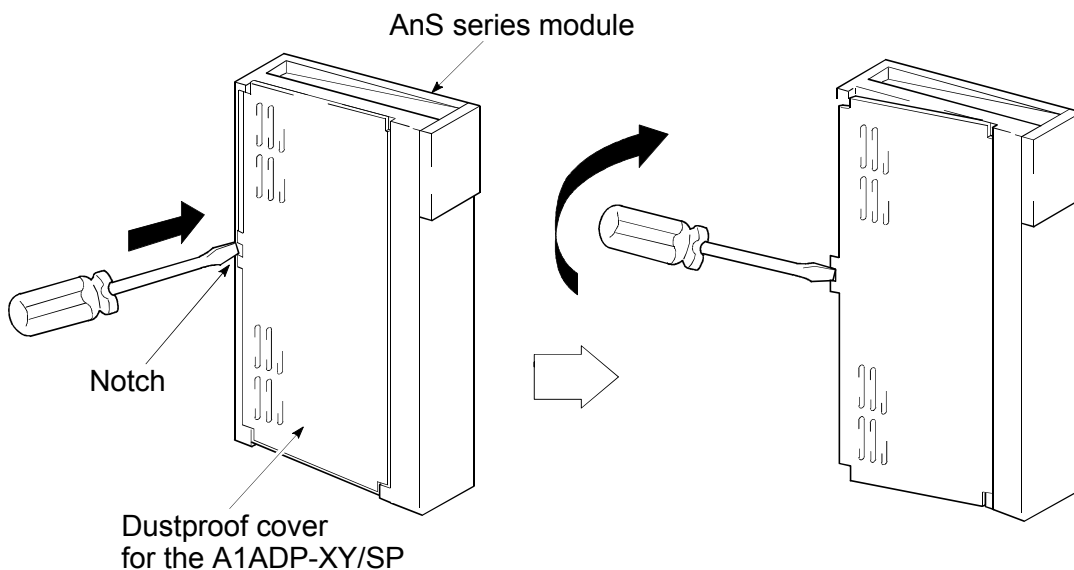
#### (1) Installation

To install the dustproof cover into the AnS series module, first insert the cover to the terminal side and then press the dustproof cover against the module as shown in the figure.



#### (2) Removal

To remove the dustproof cover from the I/O module, insert the tip of a flat-head screwdriver into the hole as shown in the figure, then pry the tab of the cover out from the hole using the screwdriver.



## 5.2.3 Installing/removing the AnS series module

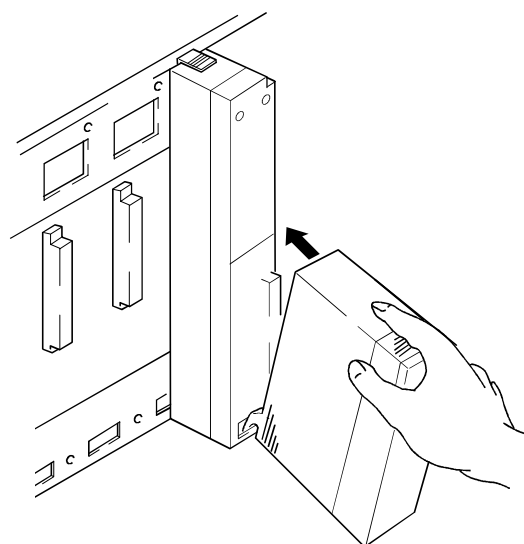
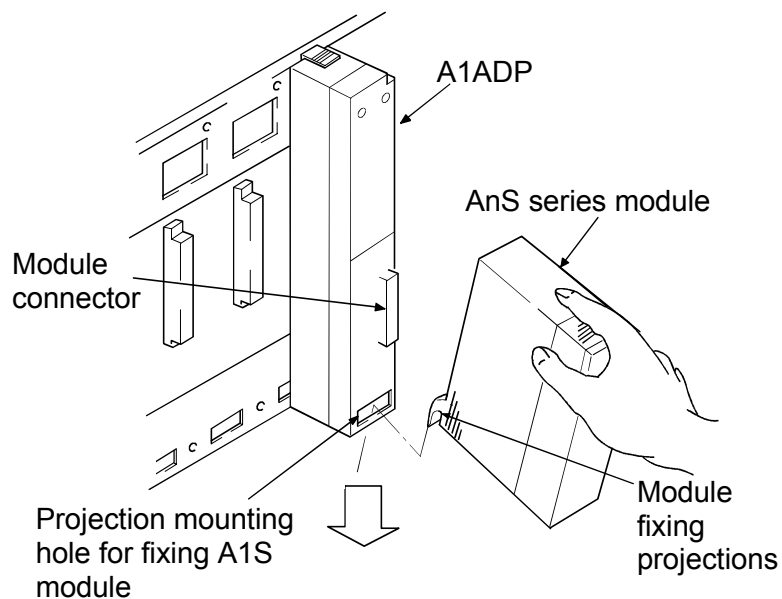
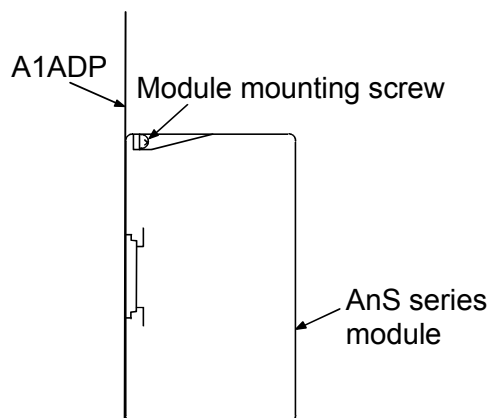
### (1) AnS series module installation

Insert the module fixing projection of the AnS series module into a projection mounting hole for fixing A1S module on the A1ADP.

Install the AnS series module to the A1ADP by pushing it in the direction of an arrow.

Tighten the module mounting screw after confirming that the module is securely installed to the A1ADP.

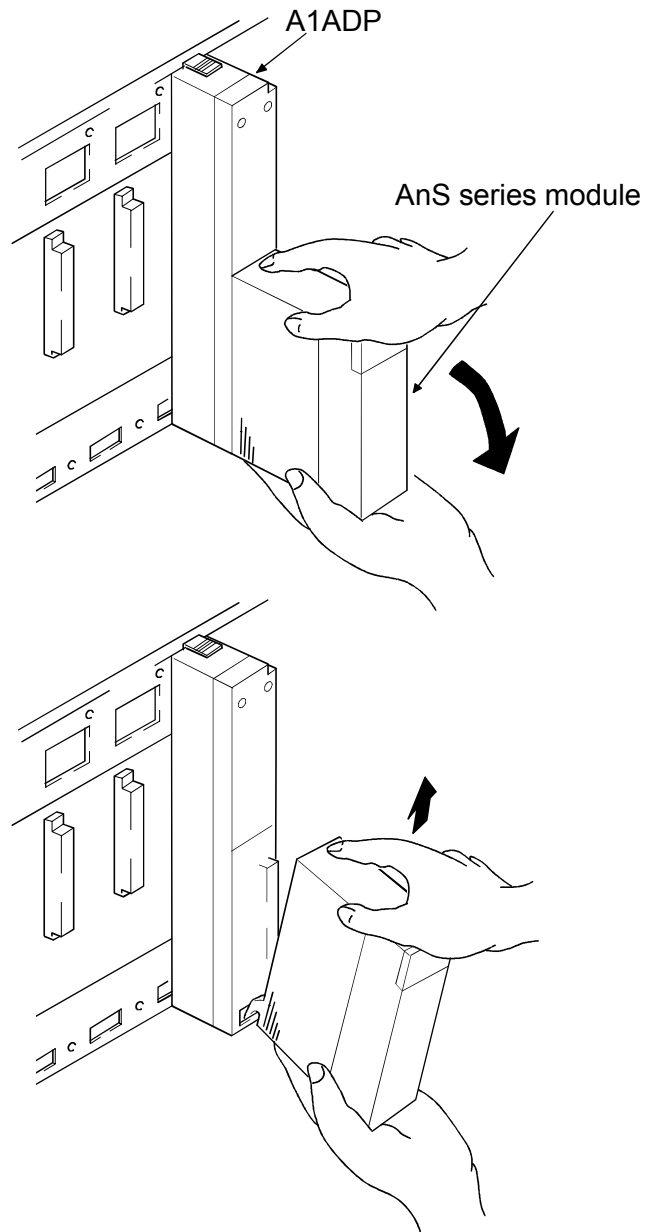
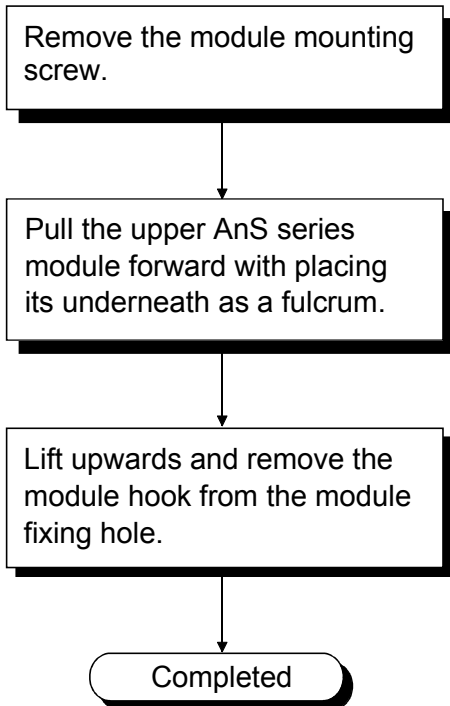
Completed



#### POINT

For fixing the AnS series module, insert the module fixing projection into the module fixing hole. Forceful installation may damage the module connector and/or A1ADP.

## (2) AnS series module removal



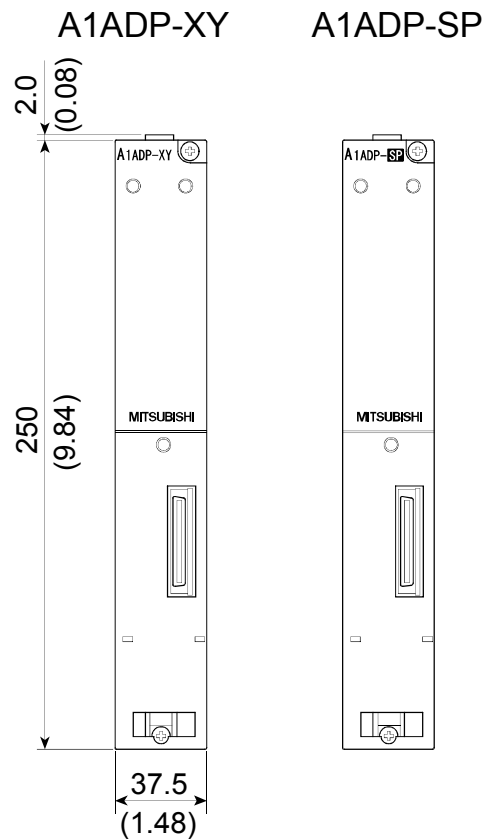
### POINT

For removing the AnS series module, untighten the module mounting screw first and then remove the module fixing projection from the module fixing hole. Forceful installation may damage the module connector and/or A1ADP.

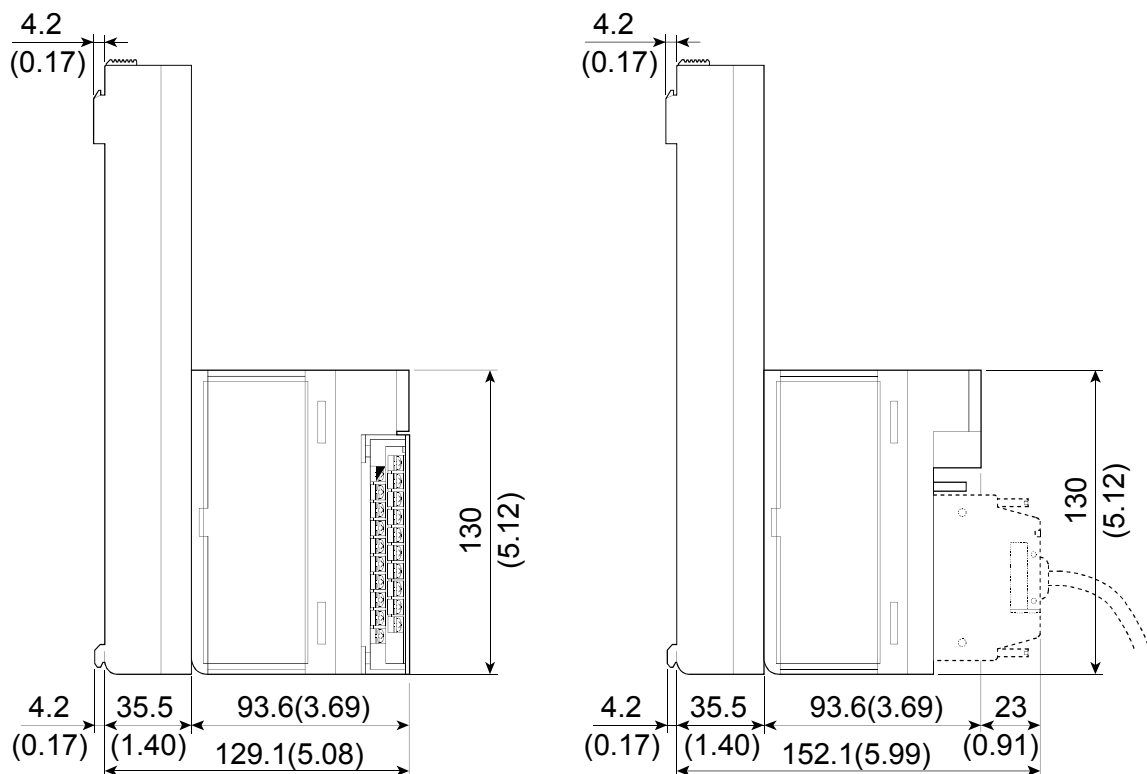


## 6. EXTERNAL DIMENSIONS

The external dimensions of the A1ADP are shown below.



When a module is installed



Unit: mm (inch)

## 7. COMPATIBLE MODELS LIST

This section describes the AnS series modules that can be installed to the A1ADP.

| Product       | Model     | Mounting of the A1ADP |        |      | Applicable adapter |
|---------------|-----------|-----------------------|--------|------|--------------------|
|               |           | QCPU                  | QnACPU | ACPU |                    |
| Input module  | A1SX10    |                       | ○      |      | XY                 |
|               | A1SX10EU  |                       | ○      |      | XY                 |
|               | A1SX20    |                       | ○      |      | XY                 |
|               | A1SX20EU  |                       | ○      |      | XY                 |
|               | A1SX30    |                       | ○      |      | XY                 |
|               | A1SX40    |                       | ○      |      | XY                 |
|               | A1SX40-S1 |                       | ○      |      | XY                 |
|               | A1SX40-S2 |                       | ○      |      | XY                 |
|               | A1SX41    |                       | ○      |      | XY                 |
|               | A1SX41-S1 |                       | ○      |      | XY                 |
|               | A1SX41-S2 |                       | ○      |      | XY                 |
|               | A1SX42    |                       | ○      |      | XY                 |
|               | A1SX42-S1 |                       | ○      |      | XY                 |
|               | A1SX42-S2 |                       | ○      |      | XY                 |
|               | A1SX71    |                       | ○      |      | XY                 |
|               | A1SX80    |                       | ○      |      | XY                 |
|               | A1SX80-S1 |                       | ○      |      | XY                 |
|               | A1SX80-S2 |                       | ○      |      | XY                 |
|               | A1SX81    |                       | ○      |      | XY                 |
|               | A1SX81-S2 |                       | ○      |      | XY                 |
|               | A1SX82-S1 |                       | ○      |      | XY                 |
| Output module | A1SY10    |                       | ○      |      | XY                 |
|               | A1SY10EU  |                       | ○      |      | XY                 |
|               | A1SY14EU  |                       | ○      |      | XY                 |
|               | A1SY18A   |                       | ○      |      | XY                 |
|               | A1SY18AEU |                       | ○      |      | XY                 |
|               | A1SY22    |                       | ○      |      | XY                 |
|               | A1SY28A   |                       | ○      |      | XY                 |
|               | A1SY40    |                       | ○      |      | XY                 |
|               | A1SY40P   |                       | ○      |      | XY                 |
|               | A1SY41    |                       | ○      |      | XY                 |
|               | A1SY41P   |                       | ○      |      | XY                 |
|               | A1SY42P   |                       | ○      |      | XY                 |
|               | A1SY50    |                       | ○      |      | XY                 |
|               | A1SY60    |                       | ○      |      | XY                 |
|               | A1SY60E   |                       | ○      |      | XY                 |
|               | A1SY68A   |                       | ○      |      | XY                 |
|               | A1SY71    |                       | ○      |      | XY                 |
|               | A1SY80    |                       | ○      |      | XY                 |
|               | A1SY81    |                       | ○      |      | XY                 |
|               | A1SY82    |                       | ○      |      | XY                 |

"Mounting of the A1ADP" field ○: Mountable x: Not mountable

"Applicable adapter" field XY: A1ADP-XY SP: A1ADP-SP -: Not available

| Product                    | Model          | Mounting of the A1ADP |        |      | Applicable adapter |
|----------------------------|----------------|-----------------------|--------|------|--------------------|
|                            |                | QCPU                  | QnACPU | ACPU |                    |
| I/O module                 | A1SH42         |                       | ○      |      | XY                 |
|                            | A1SH42P        |                       | ○      |      | XY                 |
|                            | A1SH42-S1      |                       | ○      |      | XY                 |
|                            | A1SH42P-S1     |                       | ○      |      | XY                 |
|                            | A1SX48Y58      |                       | ○      |      | XY                 |
|                            | A1SX48Y18      |                       | ○      |      | XY                 |
|                            | A1SJ-56DR      |                       | ×      |      | -                  |
|                            | A1SJ-56DT      |                       | ×      |      | -                  |
| Dynamic scan input module  | A1S42X         |                       | ○      |      | XY                 |
| Dynamic scan output module | A1S42Y         |                       | ○      |      | XY                 |
| Dummy module               | A1SG62         |                       | ○      |      | XY                 |
| Interrupt module           | A1SI61         |                       | ○      |      | XY <sup>1</sup>    |
| Power supply module        | A1S61PN        |                       | ×      |      | -                  |
|                            | A1S62PN        |                       | ×      |      | -                  |
|                            | A1S63P         |                       | ×      |      | -                  |
| Pulse catch module         | A1SP60         |                       | ○      |      | XY                 |
| Analog timer module        | A1ST60         |                       | ○      |      | XY                 |
| Analog input module        | A1S64AD        |                       | ○      |      | SP                 |
|                            | A1S68AD        |                       | ○      |      | SP                 |
| Analog output module       | A1S62DA        |                       | ○      |      | SP                 |
|                            | A1S68DAI       |                       | ○      |      | SP                 |
|                            | A1S68DAV       |                       | ○      |      | SP                 |
| Analog I/O module          | A1S63ADA       |                       | ○      |      | SP                 |
|                            | A1S66ADA       |                       | ○      |      | XY                 |
| Temperature input module   | A1S62RD3N      |                       | ○      |      | SP                 |
|                            | A1S62RD4N      |                       | ○      |      | SP                 |
|                            | A1S68TD        |                       | ○      |      | SP                 |
| Temperature control module | A1S62TCTT-S2   |                       | ○      |      | SP                 |
|                            | A1S62TCRTBW-S2 |                       | ○      |      | SP                 |
|                            | A1S62TCRT-S2   |                       | ○      |      | SP                 |
|                            | A1S62TCTTBW-S2 |                       | ○      |      | SP                 |
|                            | A1S64TCTT-S1   |                       | ○      |      | SP                 |
|                            | A1S64TCTTBW-S1 |                       | ○      |      | SP                 |
|                            | A1S64TCRT-S1   |                       | ○      |      | SP                 |
|                            | A1S64TCRTBW-S1 |                       | ○      |      | SP                 |
|                            | A1S64TCTRT     |                       | ○      |      | SP                 |
|                            | A1S64TCTRTBW   |                       | ○      |      | SP                 |
| High-speed counter module  | A1SD61         |                       | ○      |      | SP                 |
|                            | A1SD62         |                       | ○      |      | SP                 |
|                            | A1SD62E        |                       | ○      |      | SP                 |
|                            | A1SD62D        |                       | ○      |      | SP                 |
|                            | A1SD62D-S1     |                       | ○      |      | SP                 |
| Positioning module         | A1SD70         |                       | ×      |      | -                  |
|                            | A1SD75M1       |                       | ○      |      | SP                 |
|                            | A1SD75M2       |                       | ○      |      | SP                 |
|                            | A1SD75M3       |                       | ○      |      | SP                 |

"Mounting of the A1ADP" field ○: Mountable ×: Not mountable

"Applicable adapter" field XY: A1ADP-XY SP: A1ADP-SP -: Not available

| Product   | Model            | Mounting of the A1ADP |        |      | Applicable adapter |
|---|------------------|-----------------------|--------|------|--------------------|
|   |                  | QCPU                  | QnACPU | ACPU |                    |
| Positioning module                                    | A1SD75P1-S3      |                       | ○      |      | SP                 |
|   | A1SD75P2-S3      |                       | ○      |      | SP                 |
|   | A1SD75P3-S3      |                       | ○      |      | SP                 |
| Position detection module                             | A1S62LS          |                       | ○      |      | SP                 |
| Intelligent communication module                      | A1SD51S          |                       | ○      |      | SP                 |
| Ethernet module                                       | A1SJ71E71N-B2    | ×                     | ○      | ○    | SP                 |
|   | A1SJ71E71N-B5    | ×                     | ○      | ○    | SP                 |
|   | A1SJ71E71N3-T    | ×                     | ○      | ○    | SP                 |
|   | A1SJ71QE71N-B2   | ×                     | ○      | ×    | SP                 |
|   | A1SJ71QE71N-B5   | ×                     | ○      | ×    | SP                 |
|   | A1SJ71QE71N3-T   | ×                     | ○      | ×    | SP                 |
| Serial communication module                           | A1SJ71QC24N      | ×                     | ○      | ×    | SP                 |
|   | A1SJ71QC24N-R2   | ×                     | ○      | ×    | SP                 |
|   | A1SJ71QC24N1     | ×                     | ○      | ×    | SP                 |
|   | A1SJ71QC24N1-R2  | ×                     | ○      | ×    | SP                 |
| MELSECNET/B data link module                          | A1SJ71AT21B      | ×                     | ○      | ○    | SP                 |
|   | A1SJ72T25B       |                       | ×      |      | -                  |
| MELSECNET data link module                            | A1SJ71AP21       | ×                     | ○      | ○    | SP                 |
|   | A1SJ71AR21       | ×                     | ○      | ○    | SP                 |
| MELSECNET, MELSECNET/B local station data link module | A1SJ71AP23Q      | ○                     | ×      | ×    | SP                 |
|   | A1SJ71AR23Q      | ○                     | ×      | ×    | SP                 |
|   | A1SJ71AT23BQ     | ○                     | ×      | ×    | SP                 |
| CC-Link system master/local module                    | A1SJ61BT11       | ×                     | ×      | ○    | SP                 |
|   | A1SJ61QBT11      | ○                     | ○      | ×    | SP                 |
| MELSECNET/ MINI-S3 master module                      | A1SJ71PT32-S3    |                       | ○      |      | SP                 |
| MELSEC-I/O LINK master module                         | A1SJ51T64        |                       | ○      |      | SP <sup>*1</sup>   |
| JEMANET (OPCN-1) interface module                     | A1SJ71J92-S3     |                       | ○      |      | SP                 |
|   | A1SJ72J95        |                       | ×      |      | -                  |
| B/NET interface module                                | A1SJ71B62-S3     |                       | ○      |      | SP                 |
| Computer link module                                  | A1SJ71UC24-R2    | ×                     | ○      | ○    | SP                 |
|   | A1SJ71UC24-PRF   | ×                     | ○      | ○    | SP                 |
|   | A1SJ71UC24-R4    | ○ <sup>*2</sup>       | ○      | ○    | SP                 |
| S-LINK master module                                  | A1SJ71SL92N      |                       | ○      |      | SP                 |
| AS-i master module                                    | A1SJ71AS92       |                       | ○      |      | SP                 |
| Modem interface module                                | A1SJ71CMO-S3     | ×                     | ○      | ○    | SP                 |
| PC fault detection module                             | A1SS91           |                       | ○      |      | SP <sup>*1</sup>   |
| Memory card interface module                          | A1SD59J-S2       |                       | ○      |      | SP                 |
| ID interface module                                   | A1SD35ID1        |                       | ○      |      | SP                 |
|   | A1SD35ID2        |                       | ○      |      | SP                 |
| MODBUS module   | A1SJ71UC24-R2-S2 |                       | ○      |      | SP                 |
|   | A1SJ71UC24-R4-S2 |                       | ○      |      | SP                 |
| Profibus-DP interface module                          | A1SJ71PB92D      |                       | ○      |      | SP                 |
|   | A1SJ71PB93D      |                       | ○      |      | SP                 |
| Profibus-FMS interface module                         | A1SJ71PB96F      |                       | ○      |      | SP                 |
| DeviceNet master module                               | A1SJ71DN91       |                       | ○      |      | SP                 |

"Mounting of the A1ADP" field ○: Mountable ×: Not mountable

"Applicable adapter" field XY: A1ADP-XY SP: A1ADP-SP -: Not available

\*1: Take care since the combination of the module type configured in the I/O assignment setting and the A1ADP model that can be combined differs.

\*2: The adapter is mountable only when the multidrop link function is used.

## 8. REPLACEABLE MODULES LIST

The following lists the A/QnA (large type) series modules that can be replaced by the A1ADP + AnS series module.

### 8.1 How to See the List

| Product         | Related model for discontinuation | Transition to the AnS series |              |  |                    |
|-----------------|-----------------------------------|------------------------------|--------------|--|--------------------|
|                 | A series model                    | AnS series model             | Restrictions |  | Applicable adapter |
| Ethernet module | AJ71E71N-B2<br>670mA              | A1SJ71E71N-B2<br>660mA       | ○            | No restrictions  | SP                 |
| Input module    | AX50-S1<br><br>55mA               | None                         | ×            | Alternating with A1SX40 is recommended.<br>1) External wiring: Changed<br>Connect a 4.7kΩ (1/2W or more) to the external signal wire serially.<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed | Not used           |
| i               |                                   | ii                           | iii          | iv   | v                  |

#### Description

- i ... Classifies the transition list by a product.
- ii ... Indicates each module name of the A series and its 5VDC internal current consumption.
- iii ... Indicates each module name of the AnS series and its 5VDC internal current consumption.

5VDC internal current consumption for the A1ADP + AnS series module is calculated by adding the 5VDC internal current consumption for the A1ADP to this value.

For the A1ADP-XY: The value above + 3.4mA

For the A1ADP-SP: The value above + 0mA

iv ... Indicates whether any restriction is given or not when mounting the A1ADP + AnS module (A module with the name provided in the Model column.).

|                             |  |
|-----------------------------|--|
| ○                           | No restrictions  |
| △                           | Partially restricted.<br>The restriction outline is described in the Remark (restrictions) column.                 |
| ×                           | No alternative model<br>The alternating method is described in the Remark (restrictions) column.                   |
| × (△ as for specifications) | The performance specifications are compatible while the module cannot be mounted due to the expanded module width. |

v ... Indicates an installable A1ADP model.

|          |   |
|----------|---|
| XY       | A1ADP-XY (An adapter only for I/O modules)              |
| SP       | A1ADP-SP (An adapter only for special function modules) |
| Not used | Either of the A1ADPs cannot be installed.               |

| POINT |   |
|-------|---|
| (1)   | When replacing the A series module by the A1ADP + AnS series module, the internal current consumption may increase.<br>At replacement, make sure to check the 5VDC internal current consumption of the modules before and after replacement. If the 5VDC internal current consumption increases after the replacement, confirm that the current consumption of the modules used does not exceed the rated output current of the power supply module used.   |
| (2)   | If the A1ADP + AnS series module is mounted to an extension base unit (type requiring no power supply module) (A52B, A55B, or A58B) when 5VDC internal current consumption is increased, voltage drop increases in the extension cable. Therefore, recalculating the receiving end voltage is required. (For confirmation method, refer to the "Application standards of Extension Base Units" (A52B, A55B, or A58B) in the CPU module's User's Manual.)  |
| (3)   | If the execution of (1) or (2) results in excess of rated output current of a power supply module, or drop of receiving end voltage to less than 4.75VDC, take the following measures.<br>1) Review the system configuration.<br>2) Do not use the transition models.   |
| (4)   | As for the following nine models, the current consumption is greatly increased by the transition. Pay special attention to the models in (1) to (3) above.<br>1) AY41(-UL)(230mA) → A1SY41(500mA) <sup>*1</sup><br>2) AY70(100mA) → A1SY71(400mA)<br>3) AY81(230mA) → A1SY81(500mA)<br>4) AY82EP(290mA) → A1SY82(930mA)<br>5) AH42(245mA) → A1SH42(500mA)<br>6) A68DAI-S1(150mA) → A1S68DAI(850mA)<br>7) A68DAV(150mA) → A1S68DAV(650mA)<br>8) AJ71E71N-T(400mA) → A1SJ71E71N3-T(690mA)<br><sup>*1</sup> : For this model, refer to A1SY4□P in the transition lists from Section 8.2 to Section 8.4. For replacement with the A1SY4□, refer to the manual for the specifications. |

## 8.2 List of Transition from the A Series to AnS Series

| Product      | Related model for discontinuation | Transition to the AnS series |              |  |                    |
|--------------|-----------------------------------|------------------------------|--------------|--|--------------------|
|              | A series model                    | AnS series model             | Restrictions |  | Applicable adapter |
| Input module | AX10                              | A1SX10                       | △            | 1) External wiring: Changed<br>Screw size: M3→M3.5<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed                                  | XY                 |
|              | 55mA                              | 50mA                         |              | 5) Functions: Not changed  |                    |
|              | AX10-UL                           | A1SX10                       | △            | 1) External wiring: Changed<br>Screw size: M3→M3.5<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed                                  | XY                 |
|              | 55mA                              | 50mA                         |              | 5) Functions: Not changed  |                    |
|              | AX11                              | A1SX10                       | △            | 1) External wiring: Changed<br>Screw size: M3→M3.5<br>2) Number of slots: Changed<br>(2 modules required)<br>3) Program<br>Number of occupied I/O points:<br>Not changed (32=16×2)<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed | XY                 |
|              | 110mA                             | 50mA                         |              | 5) Functions: Not changed  |                    |
|              | AX11EU                            | A1SX10EU                     | △            | 1) External wiring: Changed<br>2) Number of slots: Changed<br>(2 modules required)<br>3) Program<br>Number of occupied I/O points:<br>Not changed (32=16×2)<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed                        | XY                 |
|              | 150mA                             | 50mA                         |              | 5) Functions: Not changed  |                    |

| Product         | Related model<br>for<br>discontinuation | Transition to the AnS series |              |   |                       |
|-----------------|---|------------------------------|--------------|---|-----------------------|
|                 | A series<br>model                       | AnS series<br>model          | Restrictions |   | Applicable<br>adapter |
| Input<br>module | AX20                                    | A1SX20                       | △            | 1) External wiring: Changed<br>Screw size: M3→M3.5<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed                              | XY                    |
|                 | 55mA                                    | 50mA                         |              |   |                       |
|                 | AX20-UL                                 | A1SX20                       | △            | 1) External wiring: Changed<br>Screw size: M3→M3.5<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed                              | XY                    |
|                 | 55mA                                    | 50mA                         |              |   |                       |
|                 | AX21                                    | A1SX20                       | △            | 1) External wiring: Changed<br>Screw size: M3→M3.5<br>2) Number of slots: Changed<br>(2 modules required)<br>3) Program<br>Number of occupied I/O points:<br>Not changed (32=16×2)<br>4) Specifications<br>Rated input voltage: Changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed | XY                    |
|                 | 110mA                                   | 50mA                         |              |   |                       |
|                 | AX21EU                                  | A1SX20EU                     | △            | 1) External wiring: Changed<br>2) Number of slots: Changed<br>(2 modules required)<br>3) Program<br>Number of occupied I/O points:<br>Not changed (32=16×2)<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed                    | XY                    |
|                 | 150mA                                   | 50mA                         |              |   |                       |



| Product         | Related model<br>for<br>discontinuation | Transition to the AnS series |              |   |                       |
|-----------------|---|------------------------------|--------------|---|-----------------------|
|                 | A series<br>model                       | AnS series<br>model          | Restrictions |   | Applicable<br>adapter |
| Input<br>module | AX31                                    | A1SX30                       | △            | 1) External wiring: Changed<br>Screw size: M3→M3.5<br>2) Number of slots: Changed<br>(2 modules required)<br>3) Program<br>Number of occupied I/O points:<br>Not changed (32=16×2)<br>4) Specifications<br>Rated input voltage: Changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed    | XY                    |
|                 | 110mA                                   | 50mA                         |              | 5) Functions: Not changed   |                       |
|                 | AX31-S1                                 | A1SX41                       | △            | 1) External wiring: Changed<br>(Connector terminal block must be<br>converted.)<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not<br>changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed | XY                    |
|                 | 110mA                                   | 80mA                         |              | 5) Functions: Not changed   |                       |
|                 | AX40                                    | A1SX40                       | △            | 1) External wiring: Changed<br>Screw size: M3→M3.5<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not<br>changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed                              | XY                    |
|                 | 55mA                                    | 50mA                         |              | 5) Functions: Not changed   |                       |
|                 | AX40-UL                                 | A1SX40                       | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not<br>changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed   | XY                    |
|                 | 55mA                                    | 50mA                         |              | 5) Functions: Not changed   |                       |

| Product         | Related model<br>for<br>discontinuation | Transition to the AnS series |              |   |                       |
|-----------------|---|------------------------------|--------------|---|-----------------------|
|                 | A series<br>model                       | AnS series<br>model          | Restrictions |   | Applicable<br>adapter |
| Input<br>module | AX41                                    | A1SX41                       | △            | 1) External wiring: Changed<br>(Connector terminal block must be converted.)<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed  | XY                    |
|                 | 110mA                                   | 80mA                         |              |   |                       |
|                 | AX41-UL                                 | A1SX41                       | △            | 1) External wiring: Changed<br>(Connector terminal block must be converted.)<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed  | XY                    |
|                 | 110mA                                   | 80mA                         |              |   |                       |
|                 | AX41-S1                                 | A1SX41-S1                    | △            | 1) External wiring: Changed<br>(Connector terminal block must be converted.)<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated input voltage: Changed (12VDC not applicable)<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed<br>6) Since internal current consumption increases by combination with the A1ADP-XY, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)). | XY                    |
|                 | 110mA                                   | 120mA                        |              |   |                       |

| Product         | Related model<br>for<br>discontinuation | Transition to the AnS series |              |   |                       |
|-----------------|---|------------------------------|--------------|---|-----------------------|
|                 | A series<br>model                       | AnS series<br>model          | Restrictions |   | Applicable<br>adapter |
| Input<br>module | AX42                                    | A1SX42                       | △            | 1) External wiring: Not changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed   | XY                    |
|                 | 120mA                                   | 90mA                         |              |   |                       |
|                 | AX42-S1                                 | A1SX42-S<br>1                | △            | 1) External wiring: Not changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated input voltage: Changed (12VDC not<br>applicable)<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed<br>6) Since internal current consumption increases<br>by combination with the A1ADP-XY,<br>checking power capacity and receiving end<br>voltage is required (Refer to POINT (1) to<br>(3)). | XY                    |
|                 | 120mA                                   | 160mA                        |              |   |                       |
|                 | AX50-S1                                 | None                         | ×            | Alternating with A1SX40 is recommended.<br>1) External wiring: Changed<br>Connect a 4.7kΩ (1/2W or more) to the<br>external signal wire serially.<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated input voltage: Changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed   | Not used              |
|                 | 55mA                                    |                              |              |   |                       |

| Product      | Related model for discontinuation | Transition to the AnS series |              |  |                    |
|--------------|-----------------------------------|------------------------------|--------------|--|--------------------|
|              | A series model                    | AnS series model             | Restrictions |  | Applicable adapter |
| Input module | AX60-S1                           | None                         | ×            | Alternating with A1SX40 is recommended.<br>1) External wiring: Changed<br>Connect a 15kΩ (3W or more) to the external signal wire serially.<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated input voltage: Changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed  | Not used           |
|              | 55mA                              |                              |              |  |                    |
|              | AX70                              | A1SX71                       | △            | 1) External wiring: Changed<br>(Connector terminal block must be converted.)<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed<br>6) Since internal current consumption increases by combination with the A1ADP-XY, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)). | XY                 |
|              | 55mA                              | 75mA                         |              |  |                    |
|              | AX70-UL                           | A1SX71                       | △            | 1) External wiring: Changed<br>(Connector terminal block must be converted.)<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed<br>6) Since internal current consumption increases by combination with the A1ADP-XY, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)). | XY                 |
|              | 55mA                              | 75mA                         |              |  |                    |

| Product         | Related model<br>for<br>discontinuation | Transition to the AnS series |              |  |                       |
|-----------------|---|------------------------------|--------------|--|-----------------------|
|                 | A series<br>model                       | AnS series<br>model          | Restrictions |  | Applicable<br>adapter |
| Input<br>module | AX71                                    | A1SX71                       | △            | 1) External wiring: Changed<br>(Connector terminal block must be converted.)<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed | XY                    |
|                 | 110mA                                   | 75mA                         |              |  |                       |
|                 | AX80                                    | A1SX80                       | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed  | XY                    |
|                 | 55mA                                    | 50mA                         |              |  |                       |
|                 | AX80-UL                                 | A1SX80                       | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed  | XY                    |
|                 | 55mA                                    | 50mA                         |              |  |                       |
|                 | AX80E                                   | A1SX80-S1                    | △            | 1) External wiring: Changed<br>Screw size: M3→M3.5<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated input voltage: Changed<br>(12VDC not applicable)<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed     | XY                    |
|                 | 55mA                                    | 50mA                         |              |  |                       |

| Product         | Related model<br>for<br>discontinuation | Transition to the AnS series |              |  |                       |
|-----------------|---|------------------------------|--------------|--|-----------------------|
|                 | A series<br>model                       | AnS series<br>model          | Restrictions |  | Applicable<br>adapter |
| Input<br>module | AX81                                    | A1SX81                       | △            | 1) External wiring: Changed<br>(Connector terminal block must be converted.)<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed   | XY                    |
|                 | 110mA                                   | 80mA                         |              |  |                       |
|                 | AX81B                                   | None                         | ×            | Alternating with A1SX81 is recommended.<br>1) External wiring: Changed<br>(Connector terminal block must be converted.)<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions:<br>The wire breakage detection function not provided | Not used              |
|                 | 55mA                                    |                              |              |  |                       |
|                 | AX81-S1                                 | A1SX81                       | △            | 1) External wiring: Changed<br>(Connector terminal block must be converted.)<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated input voltage: Not changed<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed   | XY                    |
|                 | 105mA                                   | 80mA                         |              |  |                       |

| Product         | Related model<br>for<br>discontinuation | Transition to the AnS series |              |   |                       |
|-----------------|---|------------------------------|--------------|---|-----------------------|
|                 | A series<br>model                       | AnS series<br>model          | Restrictions |   | Applicable<br>adapter |
| Input<br>module | AX81-S2                                 | None                         | ×            | <p>Alternating with A1SX81 is recommended.</p> <p>1) External wiring: Changed<br/>(Connector terminal block must be converted.)<br/>Connect a 3.3kΩ (1/2W or more) or 8.2kΩ (1W or more) resistor serially to the external signal wire at 48VDC or 60VDC, respectively.</p> <p>2) Number of slots: Not changed</p> <p>3) Program<br/>Number of occupied I/O points: Not changed</p> <p>4) Specifications<br/>Rated input voltage: Changed<br/>Rated input current: Changed<br/>ON voltage/ON current: Changed<br/>OFF voltage/OFF current: Changed<br/>Input resistance: Changed</p>                                  | Not used              |
|                 | 110mA                                   |                              |              | 5) Functions: Not changed   |                       |
|                 | AX81-S3                                 | A1SX80-S1                    | △            | <p>1) External wiring: Changed<br/>Screw size: M3→M3.5</p> <p>2) Number of slots: Changed<br/>(2 modules required)</p> <p>3) Program<br/>Number of occupied I/O points: Changed</p> <p>4) Specifications<br/>Rated input voltage: Changed<br/>(12VDC not applicable)<br/>Rated input current: Changed<br/>ON voltage/ON current: Changed<br/>OFF voltage/OFF current: Changed<br/>Input resistance: Changed</p>   | XY                    |
|                 | 110mA                                   | 50mA                         |              | 5) Functions: Not changed   |                       |
|                 | AX82                                    | A1SX82-S1                    | △            | <p>1) External wiring: Changed<br/>(D sub→FCN connector)</p> <p>2) Number of slots: Not changed</p> <p>3) Program<br/>Number of occupied I/O points: Not changed</p> <p>4) Specifications<br/>Rated input voltage: Changed<br/>(12VDC not applicable)<br/>Rated input current: Changed<br/>ON voltage/ON current: Changed<br/>OFF voltage/OFF current: Changed<br/>Input resistance: Changed</p> <p>5) Functions: Not changed</p> <p>6) Since internal current consumption increases by combination with the A1ADP-XY, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)).</p> | XY                    |
|                 | 120mA                                   | 160mA                        |              |   |                       |

| Product          | Related model<br>for<br>discontinuation | Transition to the AnS series |              |  |                       |
|------------------|---|------------------------------|--------------|--|-----------------------|
|                  | A series<br>model                       | AnS series<br>model          | Restrictions |  | Applicable<br>adapter |
| Output<br>module | AY10                                    | A1SY10                       | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>(However, contact life span is reduced to half.)<br>5) Functions: Not changed<br>6) Since internal current consumption increases by combination with the A1ADP-XY, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)). | XY                    |
|                  | 115mA                                   | 120mA                        |              |  |                       |
|                  | AY10A                                   | A1SY18A                      | △            | 1) External wiring: Changed<br>2) Number of slots: Changed<br>(2 modules required)<br>3) Program<br>Number of occupied I/O points: Changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Not changed<br>6) Since internal current consumption increases by combination with the A1ADP-XY, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)).                                     | XY                    |
|                  | 115mA                                   | 240mA                        |              |  |                       |
|                  | AY10A-UL                                | A1SY18A                      | △            | 1) External wiring: Changed<br>2) Number of slots: Changed<br>(2 modules required)<br>3) Program<br>Number of occupied I/O points: Changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Not changed<br>6) Since internal current consumption increases by combination with the A1ADP-XY, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)).                                     | XY                    |
|                  | 115mA                                   | 240mA                        |              |  |                       |



| Product          | Related model<br>for<br>discontinuation | Transition to the AnS series |              |  |                       |
|------------------|---|------------------------------|--------------|--|-----------------------|
|                  | A series<br>model                       | AnS series<br>model          | Restrictions |  | Applicable<br>adapter |
| Output<br>module | AY11                                    | A1SY10                       | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>(However, contact life span is reduced to half.)<br>5) Functions: Changed<br>(No varistor, relay not replaceable)<br>6) Since internal current consumption increases by combination with the A1ADP-XY, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)). | XY                    |
|                  | 115mA                                   | 120mA                        |              |  |                       |
|                  | AY11A                                   | A1SY18A                      | △            | 1) External wiring: Changed<br>2) Number of slots: Changed<br>(2 modules required)<br>3) Program<br>Number of occupied I/O points: Changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Changed (No varistor)<br>6) Since internal current consumption increases by combination with the A1ADP-XY, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)).   | XY                    |
|                  | 115mA                                   | 240mA                        |              |  |                       |
|                  | AY11AEU                                 | A1SY18A<br>EU                | △            | 1) External wiring: Changed<br>2) Number of slots: Changed<br>(2 modules required)<br>3) Program<br>Number of occupied I/O points: Changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Changed (No varistor)<br>6) Since internal current consumption increases by combination with the A1ADP-XY, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)).   | XY                    |
|                  | 115mA                                   | 240mA                        |              |  |                       |

| Product       | Related model for discontinuation | Transition to the AnS series |              |   |                    |
|---------------|-----------------------------------|------------------------------|--------------|---|--------------------|
|               | A series model                    | AnS series model             | Restrictions |   | Applicable adapter |
| Output module | AY11E                             | A1SY10                       | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>(However, contact life span is reduced to half.)<br>5) Functions: Changed (No fuse, no varistor)<br>6) Since internal current consumption increases by combination with the A1ADP-XY, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)). | XY                 |
|               | 115mA                             | 120mA                        |              |   |                    |
|               | AY11EEU                           | A1SY10EU                     | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>(However, contact life span is reduced to half.)<br>5) Functions: Changed (No fuse, no varistor)<br>6) Since internal current consumption increases by combination with the A1ADP-XY, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)). | XY                 |
|               | 115mA                             | 120mA                        |              |   |                    |
|               | AY11-UL                           | A1SY10                       | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>(However, contact life span is reduced to half.)<br>5) Functions: Changed (No varistor)<br>6) Since internal current consumption increases by combination with the A1ADP-XY, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)).          | XY                 |
|               | 115mA                             | 120mA                        |              |   |                    |

| Product       | Related model for discontinuation | Transition to the AnS series |              |   |                    |
|---------------|-----------------------------------|------------------------------|--------------|---|--------------------|
|               | A series model                    | AnS series model             | Restrictions |   | Applicable adapter |
| Output module | AY13                              | A1SY10                       | △            | 1) External wiring: Changed<br>2) Number of slots: Changed (2 modules required)<br>Since internal current consumption increases by combination with the A1ADP-XY, when using the two modules, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)).<br>3) Program<br>Number of occupied I/O points: Not changed (32=16×2)<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed (However, contact life span is reduced to half.)<br>5) Functions: Not changed       | XY                 |
|               | 230mA                             | 120mA                        |              |   |                    |
|               | AY13E                             | A1SY10                       | △            | 1) External wiring: Changed<br>2) Number of slots: Changed (2 modules required)<br>Since internal current consumption increases by combination with the A1ADP-XY, when using the two modules, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)).<br>3) Program<br>Number of occupied I/O points: Not changed (32=16×2)<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed (However, contact life span is reduced to half.)<br>5) Functions: Changed (No fuse) | XY                 |
|               | 230mA                             | 120mA                        |              |   |                    |
|               | AY13EU                            | A1SY10EU                     | △            | 1) External wiring: Changed<br>2) Number of slots: Changed (2 modules required)<br>Since internal current consumption increases by combination with the A1ADP-XY, when using the two modules, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)).<br>3) Program<br>Number of occupied I/O points: Not changed (32=16×2)<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed (However, contact life span is reduced to half.)<br>5) Functions: Not changed       | XY                 |
|               | 230mA                             | 120mA                        |              |   |                    |

| Product          | Related model<br>for<br>discontinuation | Transition to the AnS series |              |  |                       |
|------------------|---|------------------------------|--------------|--|-----------------------|
|                  | A series<br>model                       | AnS series<br>model          | Restrictions |  | Applicable<br>adapter |
| Output<br>module | AY15EU                                  | A1SY14EU                     | △            | 1) External wiring: Changed<br>2) Number of slots: Changed<br>(2 modules required)<br>Since internal current consumption<br>increases by combination with the<br>A1ADP-XY, when using the two modules,<br>checking power capacity and receiving end<br>voltage is required (Refer to POINT (1) to<br>(3)).<br>3) Program<br>Number of occupied I/O points:<br>Not changed (32=16×2)<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>(However, contact life span is reduced to<br>half.)<br>5) Functions: Not changed | XY                    |
|                  | 150mA                                   | 120mA                        |              |  |                       |
|                  | AY22                                    | A1SY22                       | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Changed<br>(Output 2A→0.6A)<br>5) Functions: Changed (No fuse, no varistor)  | XY                    |
|                  | 305mA                                   | 270mA                        |              |  |                       |
|                  | AY23                                    | A1SY22                       | △            | 1) External wiring: Changed<br>2) Number of slots: Changed<br>(2 modules required)<br>3) Program<br>Number of occupied I/O points:<br>Not changed (32=16×2)<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Changed (No fast blow fuse)  | XY                    |
|                  | 590mA                                   | 270mA                        |              |  |                       |

| Product          | Related model<br>for<br>discontinuation | Transition to the AnS series |              |  |                       |
|------------------|---|------------------------------|--------------|--|-----------------------|
|                  | A series<br>model                       | AnS series<br>model          | Restrictions |  | Applicable<br>adapter |
| Output<br>module | AY40                                    | A1SY40P                      | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Not changed   | XY                    |
|                  | 115mA                                   | 79mA                         |              |  |                       |
|                  | AY40-UL                                 | A1SY40P                      | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Not changed   | XY                    |
|                  | 115mA                                   | 79mA                         |              |  |                       |
|                  | AY40A                                   | A1SY68A                      | △            | 1) External wiring: Changed<br>2) Number of slots: Changed<br>(2 modules required)<br>Since internal current consumption<br>increases by combination with the<br>A1ADP-XY, when using the two modules,<br>checking power capacity and receiving end<br>voltage is required (Refer to POINT (1) to<br>(3)).<br>3) Program<br>Number of occupied I/O points: Changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>Response: Slow<br>5) Functions: Not changed | XY                    |
|                  | 190mA                                   | 110mA                        |              |  |                       |
|                  | AY41                                    | A1SY41P                      | △            | 1) External wiring: Changed<br>(Connector terminal block must be<br>converted.)<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Not changed   | XY                    |
|                  | 230mA                                   | 141mA                        |              |  |                       |

| Product          | Related model<br>for<br>discontinuation | Transition to the AnS series |              |   |                       |
|------------------|---|------------------------------|--------------|---|-----------------------|
|                  | A series<br>model                       | AnS series<br>model          | Restrictions |   | Applicable<br>adapter |
| Output<br>module | AY41-UL                                 | A1SY41P                      | △            | 1) External wiring: Changed<br>(Connector terminal block must be converted.)<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Not changed               | XY                    |
|                  | 230mA                                   | 141mA                        |              |   |                       |
|                  | AY42                                    | A1SY42P                      | ○            | 1) External wiring: Not changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Not changed  | XY                    |
|                  | 340mA                                   | 170mA                        |              |   |                       |
|                  | AY42-S1                                 | A1SY42P                      | △            | 1) External wiring: Not changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>Response time: Changed<br>(from 0.3ms to 1ms or less)<br>5) Functions: Not changed   | XY                    |
|                  | 290mA                                   | 170mA                        |              |   |                       |
|                  | AY42-S3                                 | A1SY42P                      | ○            | 1) External wiring: Not changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Changed<br>(The short protection function equivalent to fuse included) | XY                    |
|                  | 290mA                                   | 170mA                        |              |   |                       |
|                  | AY42-S4                                 | A1SY42P                      | △            | 1) External wiring: Changed<br>(External supply power is required.)<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Not changed                        | XY                    |
|                  | 500mA                                   | 170mA                        |              |   |                       |

| Product       | Related model for discontinuation | Transition to the AnS series |              |  |                    |
|---------------|-----------------------------------|------------------------------|--------------|--|--------------------|
|               | A series model                    | AnS series model             | Restrictions |  | Applicable adapter |
| Output module | AY50                              | A1SY50                       | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Changed (Fuse not replaceable)<br>6) Since internal current consumption increases by combination with the A1ADP-XY, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)).                                  | XY                 |
|               | 115mA                             | 120mA                        |              |  |                    |
|               | AY50-UL                           | A1SY50                       | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Changed (Fuse not replaceable)<br>6) Since internal current consumption increases by combination with the A1ADP-XY, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)).                                  | XY                 |
|               | 115mA                             | 120mA                        |              |  |                    |
|               | AY51                              | A1SY50                       | △            | 1) External wiring: Changed<br>2) Number of slots: Changed (2 modules required)<br>Since internal current consumption increases by combination with the A1ADP-XY, when using the two modules, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)).<br>3) Program<br>Number of occupied I/O points: Not changed (32=16×2)<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Not changed | XY                 |
|               | 230mA                             | 120mA                        |              |  |                    |

| Product          | Related model<br>for<br>discontinuation | Transition to the AnS series |              |  |                       |
|------------------|---|------------------------------|--------------|--|-----------------------|
|                  | A series<br>model                       | AnS series<br>model          | Restrictions |  | Applicable<br>adapter |
| Output<br>module | AY51-S1                                 | A1SY50                       | △            | 1) External wiring: Changed<br>2) Number of slots: Changed<br>(2 modules required)<br>Since internal current consumption<br>increases by combination with the<br>A1ADP-XY, when using the two modules,<br>checking power capacity and receiving end<br>voltage is required (Refer to POINT (1) to<br>(3)).<br>3) Program<br>Number of occupied I/O points: Not<br>changed (32=16×2)<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Changed (Fuse not replaceable) | XY                    |
|                  | 230mA                                   | 120mA                        |              |  |                       |
|                  | AY51-UL                                 | A1SY50                       | △            | 1) External wiring: Changed<br>2) Number of slots: Changed<br>(2 modules required)<br>Since internal current consumption<br>increases by combination with the<br>A1ADP-XY, when using the two modules,<br>checking power capacity and receiving end<br>voltage is required (Refer to POINT (1) to<br>(3)).<br>3) Program<br>Number of occupied I/O points: Not<br>changed (32=16×2)<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Not changed                    | XY                    |
|                  | 230mA                                   | 120mA                        |              |  |                       |
|                  | AY60                                    | A1SY60                       | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not<br>changed<br>4) Specifications<br>Rated output voltage: Changed<br>(48VDC not applicable)<br>Rated output current: Not changed<br>5) Functions: Not changed<br>6) Since internal current consumption<br>increases by combination with the<br>A1ADP-XY, checking power capacity and<br>receiving end voltage is required (Refer to<br>POINT (1) to (3)).  | XY                    |
|                  | 115mA                                   | 120mA                        |              |  |                       |



| Product          | Related model<br>for<br>discontinuation | Transition to the AnS series |              |   |                       |
|------------------|---|------------------------------|--------------|---|-----------------------|
|                  | A series<br>model                       | AnS series<br>model          | Restrictions |   | Applicable<br>adapter |
| Output<br>module | AY60E                                   | A1SY60E                      | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not<br>changed<br>4) Specifications<br>Rated output voltage: Changed<br>(48VDC not applicable)<br>Rated output current: Not changed<br>5) Functions: Not changed<br>6) Since internal current consumption<br>increases by combination with the<br>A1ADP-XY, checking power capacity and<br>receiving end voltage is required (Refer to<br>POINT (1) to (3)). | XY                    |
|                  | 115mA                                   | 200mA                        |              |   |                       |
|                  | AY60S                                   | A1SY60                       | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Changed<br>4) Specifications<br>Rated output voltage: Changed<br>(48VDC not applicable)<br>Rated output current: Not changed<br>5) Functions: Not changed<br>6) Since internal current consumption<br>increases by combination with the<br>A1ADP-XY, checking power capacity and<br>receiving end voltage is required (Refer to<br>POINT (1) to (3)).        | XY                    |
|                  | 75mA                                    | 120mA                        |              |   |                       |
|                  | AY60S-UL                                | A1SY60                       | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Changed<br>4) Specifications<br>Rated output voltage: Changed<br>(48VDC not applicable)<br>Rated output current: Not changed<br>5) Functions: Not changed<br>6) Since internal current consumption<br>increases by combination with the<br>A1ADP-XY, checking power capacity and<br>receiving end voltage is required (Refer to<br>POINT (1) to (3)).        | XY                    |
|                  | 75mA                                    | 120mA                        |              |   |                       |

| Product          | Related model<br>for<br>discontinuation | Transition to the AnS series |              |   |                       |
|------------------|---|------------------------------|--------------|---|-----------------------|
|                  | A series<br>model                       | AnS series<br>model          | Restrictions |   | Applicable<br>adapter |
| Output<br>module | AY70                                    | A1SY71                       | △            | 1) External wiring: Changed<br>(Connector terminal block must be converted.)<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Not changed<br>6) Since internal current consumption increases<br>by combination with the A1ADP-XY,<br>checking power capacity and receiving end<br>voltage is required (Refer to POINT (1) to<br>(3)).     | XY                    |
|                  | 100mA                                   | 400mA                        |              |   |                       |
|                  | AY70-UL                                 | A1SY71                       | △            | 1) External wiring: Changed<br>(Connector terminal block must be converted.)<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Not changed<br>6) Since internal current consumption increases<br>by combination with the A1ADP-XY,<br>checking power capacity and receiving end<br>voltage is required (Refer to POINT (1) to<br>(3)).     | XY                    |
|                  | 100mA                                   | 400mA                        |              |   |                       |
|                  | AY71                                    | A1SY71                       | △            | 1) External wiring: Changed<br>(Connector terminal block must be converted.)<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Not changed<br>6) Since internal current consumption increases<br>by combination with the A1ADP-XY,<br>checking power capacity and receiving end<br>voltage is required (Refer to POINT (1) to<br>(3)). | XY                    |
|                  | 200mA                                   | 400mA                        |              |   |                       |

| Product          | Related model<br>for<br>discontinuation | Transition to the AnS series |              |  |                       |
|------------------|---|------------------------------|--------------|--|-----------------------|
|                  | A series<br>model                       | AnS series<br>model          | Restrictions |  | Applicable<br>adapter |
| Output<br>module | AY72                                    | A1SY71                       | △            | 1) External wiring: Not changed<br>2) Number of slots: Changed<br>(2 modules required)<br>3) Program<br>Number of occupied I/O points: Not<br>changed (64=32×2)<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Not changed<br>6) Since internal current consumption<br>increases by combination with the<br>A1ADP-XY, checking power capacity and<br>receiving end voltage is required (Refer to<br>POINT (1) to (3)).                                  | XY                    |
|                  | 300mA                                   | 400mA                        |              |  |                       |
|                  | AY80                                    | A1SY80                       | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not<br>changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Changed (Fuse not replaceable)<br>6) Since internal current consumption<br>increases by combination with the<br>A1ADP-XY, checking power capacity and<br>receiving end voltage is required (Refer to<br>POINT (1) to (3)).   | XY                    |
|                  | 115mA                                   | 120mA                        |              |  |                       |
|                  | AY81                                    | A1SY81                       | △            | 1) External wiring: Changed (Connector<br>terminal block must be converted.)<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not<br>changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Changed<br>(Output 0.5A→0.1A)<br>5) Functions: Not changed<br>6) Since internal current consumption<br>increases by combination with the<br>A1ADP-XY, checking power capacity and<br>receiving end voltage is required (Refer to<br>POINT (1) to (3)). | XY                    |
|                  | 230mA                                   | 500mA                        |              |  |                       |

| Product          | Related model<br>for<br>discontinuation | Transition to the AnS series |              |   |                       |
|------------------|---|------------------------------|--------------|---|-----------------------|
|                  | A series<br>model                       | AnS series<br>model          | Restrictions |   | Applicable<br>adapter |
| Output<br>module | AY82EP                                  | A1SY82                       | △            | 1) External wiring: Changed<br>(D sub→FCN connector)<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not<br>changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Not changed<br>5) Functions: Not changed<br>6) Since internal current consumption<br>increases by combination with the<br>A1ADP-XY, checking power capacity and<br>receiving end voltage is required (Refer to<br>POINT (1) to (3)).  | XY                    |
|                  | 290mA                                   | 930mA                        |              |   |                       |
| I/O<br>module    | AH42                                    | A1SH42                       | △            | 1) External wiring: Not changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Changed<br>(32 points occupied)<br>4) Specifications<br>Rated output voltage: Changed<br>(12VDC not applicable)<br>Rated output current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed<br>6) Since internal current consumption<br>increases by combination with the<br>A1ADP-XY, checking power capacity and<br>receiving end voltage is required (Refer to<br>POINT (1) to (3)). | XY                    |
|                  |   | 500mA                        |              |   |                       |
|                  |   | A1SH42P                      | △            | 1) External wiring: Not changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Changed<br>(32 points occupied)<br>4) Specifications<br>Rated input voltage: Changed<br>(12VDC not applicable)<br>Rated input current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed   | XY                    |
|                  | 245mA                                   | 130mA                        |              |   |                       |

| Product                       | Related model<br>for<br>discontinuation | Transition to the AnS series |              |   |                       |
|-------------------------------|---|------------------------------|--------------|---|-----------------------|
|                               | A series<br>model                       | AnS series<br>model          | Restrictions |   | Applicable<br>adapter |
| Dynamic<br>scan I/O<br>module | A42XY                                   | A1S42X<br>80mA               | △            | 1) External wiring: Changed<br>2) Number of slots: Changed<br>Since internal current consumption increases by combination with the A1ADP-XY, when using the two modules, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)).<br>3) Program<br>Number of occupied I/O points: Changed (128 points occupied: 64×2)<br>4) Specifications<br>Rated output voltage: Changed (12VDC not applicable)<br>Rated output current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Not changed | XY                    |
|                               | 110mA                                   | A1S42Y<br>180mA              |              |   |                       |
| Dummy<br>module               | AG62<br>70mA                            | A1SG62<br>60mA               | ○            | No restrictions   | XY                    |
| Blanking<br>module            | AG60                                    | A1SG60                       | ○            | No restrictions   | XY/SP                 |
| Interrupt<br>module           | AI61                                    | A1SI61                       | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Not changed<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Changed<br>(Interrupt processing condition can be set in 4-point unit.)   | XY                    |
|                               | 140mA                                   | 57mA                         |              |   |                       |
|                               | AI61-S1                                 | A1SI61                       | △            | 1) External wiring: Changed<br>2) Number of slots: Not changed<br>3) Program<br>Number of occupied I/O points: Changed (16 points occupied)<br>4) Specifications<br>Rated output voltage: Not changed<br>Rated output current: Changed<br>ON voltage/ON current: Changed<br>OFF voltage/OFF current: Changed<br>Input resistance: Changed<br>5) Functions: Changed<br>(Interrupt processing condition can be set in 4-point unit.)  | XY                    |
|                               | 140mA                                   | 57mA                         |              | 6) Others: The response time is different.  |                       |

| Product                   | Related model<br>for<br>discontinuation | Transition to the AnS series |              |   |                       |
|---------------------------|---|------------------------------|--------------|---|-----------------------|
|                           | A series<br>model                       | AnS series<br>model          | Restrictions |   | Applicable<br>adapter |
| Analog<br>input<br>module | A616AD<br><br>1000mA                    | None                         | ×            | Using the A1S68AD is recommended.<br>1) External wiring: Changed<br>(Terminal block is different.)<br>2) Number of slots: Changed (2 modules<br>required)<br>3) Program: I/O signals and buffer memory<br>address are changed.<br>4) Performance specifications change:<br>8CH/module, input signals<br>(Only plus current can be input.)<br>5) Function specifications: Multiplexer function<br>not available  | Not used              |
|                           | A68AD<br><br>390mA                      | A1S68AD<br><br>400mA         | △            | 1) External wiring: Changed<br>(Terminal block is different.)<br>2) Number of slots: Not changed<br>3) Program: I/O signals and buffer memory<br>address are changed.<br>4) Performance specifications change:<br>I/O characteristics<br>5) Function specifications:<br>Setting method of the A/D conversion<br>disable function has been changed<br>6) Since internal current consumption<br>increases by combination with the<br>A1ADP-SP, checking power capacity and<br>receiving end voltage is required (Refer to<br>POINT (1) to (3)). | SP                    |
|                           | A68AD-S2<br><br>390mA                   | A1S68AD<br><br>400mA         | △            | 1) External wiring: Changed<br>(Terminal block is different.)<br>2) Number of slots: Not changed<br>3) Program: I/O signals and buffer memory<br>address are changed.<br>4) Performance specifications change:<br>I/O characteristics<br>5) Function specifications: Not changed<br>6) Since internal current consumption<br>increases by combination with the<br>A1ADP-SP, checking power capacity and<br>receiving end voltage is required (Refer to<br>POINT (1) to (3)).  | SP                    |
|                           | A68ADN<br><br>400mA                     | A1S68AD<br><br>400mA         | △            | 1) External wiring: Changed<br>(Terminal block is different.)<br>2) Number of slots: Not changed<br>3) Program: I/O signals and buffer memory<br>address are changed.<br>4) Performance specifications change:<br>I/O characteristics and resolution<br>5) Function specifications: Not changed   | SP                    |
|                           |   |                              |              |   |                       |

| Product              | Related model for discontinuation | Transition to the AnS series |              |   |                    |
|----------------------|-----------------------------------|------------------------------|--------------|---|--------------------|
|                      | A series model                    | AnS series model             | Restrictions |   | Applicable adapter |
| Multi-plexer         | A60MX 650mA                       | None                         | ×            | Alternating with multiple A1S68AD modules is recommended.   | Not used           |
|                      | A60MXRN 350mA                     | None                         | ×            | Using multiple A1S68ADs and perform isolation between channels is recommended.  | Not used           |
|                      | A60MXR 500mA                      | None                         | ×            | Using multiple A1S68ADs and perform isolation between channels is recommended.  | Not used           |
|                      | A60MXTN 640mA                     | None                         | ×            | Alternating with multiple A1S68TD modules is recommended.   | Not used           |
|                      | A60MXT 800mA                      | None                         | ×            | Alternating with multiple A1S68TD modules is recommended.   | Not used           |
| Analog output module | A616DAI 300mA                     | None                         | ×            | Using the A1S68DAI is recommended.<br>1) External wiring: Changed (Terminal block is different.)<br>2) Number of slots: Changed (2 modules required)<br>3) Program: I/O signals and buffer memory address are changed.<br>4) Performance specifications change: 8CH/module, input current range<br>5) Function specifications: The relation between the D/A conversion disable channel and the conversion time is changed.  | Not used           |
|                      | A616DAV 380mA                     | None                         | ×            | Using the A1S68DAV is recommended.<br>1) External wiring: Changed (Terminal block is different.)<br>2) Number of slots: Changed (2 modules required)<br>3) Program: I/O signals and buffer memory address are changed.<br>4) Performance specifications change: 8CH/module, resolution and accuracy<br>5) Function specifications: The relation between the D/A conversion disable channel and the conversion time is changed.  | Not used           |
|                      | A62DA 600mA                       | A1S62DA 800mA                | △            | 1) External wiring: Changed (Terminal block is different.)<br>2) Number of slots: Not changed<br>3) Program: I/O signals and buffer memory address are changed.<br>4) Performance specifications change: I/O characteristics and conversion time<br>5) Function specifications: Not changed<br>6) Since internal current consumption increases by combination with the A1ADP-SP, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)). | SP                 |
|                      |                                   |                              |              |   |                    |

| Product                    | Related model<br>for<br>discontinuation | Transition to the AnS series |              |  |                       |
|----------------------------|---|------------------------------|--------------|--|-----------------------|
|                            | A series<br>model                       | AnS series<br>model          | Restrictions |  | Applicable<br>adapter |
| Analog<br>output<br>module | A62DA-S1                                | A1S62DA                      | △            | 1) External wiring: Changed<br>(Terminal block is different.)<br>2) Number of slots: Not changed<br>3) Program: I/O signals and buffer memory<br>address are changed.<br>4) Performance specifications change: I/O<br>characteristics and conversion time<br>5) Function specifications: Not changed<br>6) Since internal current consumption<br>increases by combination with the<br>A1ADP-SP, checking power capacity and<br>receiving end voltage is required (Refer to<br>POINT (1) to (3)).   | SP                    |
|                            | 600mA                                   | 800mA                        |              |  |                       |
|                            | A68DAI-S1                               | A1S68DAI                     | △            | 1) External wiring: Changed<br>(Terminal block is different.)<br>2) Number of slots: Not changed<br>3) Program: I/O signals and buffer memory<br>address are changed.<br>4) Performance specifications change:<br>Output current range, I/O characteristics,<br>and increased current consumption<br>5) Function specifications: Not changed<br>6) Since internal current consumption<br>increases by combination with the<br>A1ADP-SP, checking power capacity and<br>receiving end voltage is required (Refer to<br>POINT (1) to (3)). | SP                    |
|                            | 150mA                                   | 850mA                        |              |  |                       |
|                            | A68DAV                                  | A1S68DAV                     | △            | 1) External wiring: Changed<br>(Terminal block is different.)<br>2) Number of slots: Not changed<br>3) Program: I/O signals and buffer memory<br>address are changed.<br>4) Performance specifications change: Output<br>current range, I/O characteristics, and<br>increased current consumption<br>5) Function specifications: Not changed<br>6) Since internal current consumption<br>increases by combination with the<br>A1ADP-SP, checking power capacity and<br>receiving end voltage is required (Refer to<br>POINT (1) to (3)). | SP                    |
|                            | 150mA                                   | 650mA                        |              |  |                       |



| Product                             | Related model<br>for<br>discontinuation | Transition to the AnS series |              |  |                       |
|-------------------------------------|---|------------------------------|--------------|--|-----------------------|
|                                     | A series<br>model                       | AnS series<br>model          | Restrictions |  | Applicable<br>adapter |
| Temperature input<br>module         | A616TD                                  | None                         | ×            | Using the A1S68TD is recommended.<br>1) External wiring: Changed<br>(Terminal block is different.)<br>2) Number of slots: Changed<br>(2 modules required)<br>3) Program: I/O signals and buffer memory<br>address are changed.<br>4) Performance specifications change:<br>8CH/module, input temperature range,<br>and conversion accuracy<br>5) Function specifications:<br>The relation between the conversion<br>disable channel and the conversion time is<br>changed. | Not used              |
|                                     | 1000mA                                  |                              |              |  |                       |
|                                     | A68RD3N                                 | None                         | ×            | Using the A1S62RD3N is recommended.<br>1) External wiring: Changed<br>(Terminal block is different.)<br>2) Number of slots: Changed<br>(4 modules required)<br>3) Program: Changed<br>4) Performance specifications change:<br>2CH/module<br>5) Function specifications: Not changed   | Not used              |
|                                     | 940mA                                   |                              |              |  |                       |
|                                     | A68RD4N                                 | None                         | ×            | Using the A1S62RD4N is recommended.<br>1) External wiring: Changed<br>(Terminal block is different.)<br>2) Number of slots: Changed<br>(4 modules required)<br>3) Program: Changed<br>4) Performance specifications change:<br>2CH/module<br>5) Function specifications: Not changed   | Not used              |
|                                     | 410mA                                   |                              |              |  |                       |
| High-<br>speed<br>counter<br>module | AD61                                    | A1SD62                       | △            | 1) External wiring: Changed<br>(Terminal block is different.)<br>2) Number of slots: Not changed<br>3) Program: Buffer memory address is<br>changed.<br>4) Performance specifications change:<br>Upward-compatibility<br>5) Function specifications:<br>Upward-compatibility   | SP                    |
|                                     | 300mA                                   | 100mA                        |              |  |                       |
|                                     | AD61-S1                                 | A1SD62                       | △            | 1) External wiring: Changed<br>(Terminal block is different.)<br>2) Number of slots: Not changed<br>3) Program: Buffer memory address is<br>changed.<br>4) Performance specifications change:<br>Upward-compatibility<br>5) Function specifications:<br>Upward-compatibility   | SP                    |
|                                     | 300mA                                   | 100mA                        |              |  |                       |

| Product               | Related model<br>for<br>discontinuation | Transition to the AnS series |              |   |                       |
|-----------------------|---|------------------------------|--------------|---|-----------------------|
|                       | A series<br>model                       | AnS series<br>model          | Restrictions |   | Applicable<br>adapter |
| Positioning<br>module | AD70                                    | A1SD70                       | ×<br>*1      | 1) External wiring: Changed (Terminal block is different.)<br>2) Number of slots: 1 slot 2 slots<br>3) Program: Not changed<br>4) Performance specifications change: Not changed<br>5) Function specifications: Not changed | Not used              |
|                       | 300mA                                   | 300mA                        |              |   |                       |
|                       | AD72<br>900mA                           | None                         | ×            | No alternative model  | Not used              |
|                       | AD75M1                                  | A1SD75M1                     | ○            | No restrictions<br>The A1SD75-C01HA cable is required since the peripheral device connection connector is different.  | SP                    |
|                       | 700mA                                   | 700mA                        |              |   |                       |
|                       | AD75M2                                  | A1SD75M2                     | ○            | No restrictions<br>The A1SD75-C01HA cable is required since the peripheral device connection connector is different.  | SP                    |
|                       | 700mA                                   | 700mA                        |              |   |                       |
|                       | AD75M3                                  | A1SD75M3                     | ○            | No restrictions<br>The A1SD75-C01HA cable is required since the peripheral device connection connector is different.  | SP                    |
|                       | 700mA                                   | 700mA                        |              |   |                       |
|                       | AD75P1-S3                               | A1SD75P1-S3                  | ○            | No restrictions<br>The A1SD75-C01HA cable is required since the peripheral device connection connector is different.  | SP                    |
|                       | 700mA                                   | 700mA                        |              |   |                       |
|                       | AD75P2-S3                               | A1SD75P2-S3                  | ○            | No restrictions<br>The A1SD75-C01HA cable is required since the peripheral device connection connector is different.  | SP                    |
|                       | 700mA                                   | 700mA                        |              |   |                       |
|                       | AD75P3-S3                               | A1SD75P3-S3                  | ○            | No restrictions<br>The A1SD75-C01HA cable is required since the peripheral device connection connector is different.  | SP                    |
|                       | 700mA                                   | 700mA                        |              |   |                       |

\*1: As for specification, △

| Product                           | Related model<br>for<br>discontinuation | Transition to the AnS series |              |   |                       |
|-----------------------------------|---|------------------------------|--------------|---|-----------------------|
|                                   | A series<br>model                       | AnS series<br>model          | Restrictions |   | Applicable<br>adapter |
| Position<br>detection<br>module   | A61LS<br>800mA                          | None                         | ×            | No alternative model  | Not used              |
|                                   | A62LS-S5<br>1500mA                      | None                         | ×            | No alternative model  | Not used              |
|                                   | A63LS<br>1350mA                         | None                         | ×            | No alternative model  | Not used              |
| Intelligent<br>communi-<br>cation | AD51H-S3                                | A1SD51S                      | △            | The A1SD51S is different from the AD51H-S3 in the following specifications.<br>AD51H-S3 → A1SD51S<br>1) Number of tasks: 8→2<br>2) Memory: 300→60kbytes<br>3) Parallel: Available→None<br>4) RS-232 connector: 25-pin→9-pin<br>5) Number of slots: 2→1<br>(One slot will be an empty slot.)<br>6) Memory card I/F: 2→0 (File creation is disabled.)<br>7) LED display not provided<br>8) Program record medium:<br>Memory card, EPROM→built-in EEPROM | SP                    |
|                                   | 1000mA                                  | 400mA                        |              |   |                       |
|                                   | AD51-S3<br>1300mA                       | A1SD51S<br>400mA             | △            | Replace the BASIC program with a program for A1SD51S  | SP                    |
| Ethernet<br>module                | AJ71E71N-B2<br>670mA                    | A1SJ71E<br>71N-B2<br>660mA   | ○            | No restrictions   | SP                    |
|                                   | AJ71E71N-B5<br>550mA                    | A1SJ71E<br>71N-B5<br>570mA   | ○            | Since internal current consumption increases by combination with the A1ADP-SP, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)).   | SP                    |
|                                   | AJ71E71N-T<br>400mA                     | A1SJ71E<br>71N3-T<br>690mA   | ○            | Since internal current consumption increases by combination with the A1ADP-SP, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)).   | SP                    |
|                                   | AJ71E71N3-T<br>690mA                    | A1SJ71E<br>71N3-T<br>690mA   | ○            | No restrictions   | SP                    |
|                                   |   |                              |              |   |                       |

| Product                                       | Related model<br>for<br>discontinuation | Transition to the AnS series   |              |   |                       |
|---|---|--------------------------------|--------------|---|-----------------------|
|   | A series<br>model                       | AnS series<br>model            | Restrictions |   | Applicable<br>adapter |
| MELSEC<br>NET/B<br>data link<br>module        | AJ71AT21B<br><br>720mA                  | A1SJ71AT<br>21B<br><br>660mA   | ○            | No restrictions   | SP                    |
| MELSEC<br>NET<br>data link<br>module          | AJ71AP21<br><br>500mA                   | A1SJ71AP<br>21<br>330mA        | ○            | No restrictions   | SP                    |
|   | AJ71AR21<br><br>900mA                   | A1SJ71AR<br>21<br>800mA        | ○            | No restrictions   | SP                    |
| CC-Link<br>master/<br>local<br>module         | AJ61BT11<br><br>450mA                   | A1SJ61BT<br>11<br><br>400mA    | ○            | No restrictions   | SP                    |
| MELSEC<br>NET/MINI<br>-S3<br>master<br>module | AJ71PT32-S3<br><br>350mA                | A1SJ71PT<br>32-S3<br><br>350mA | △            | Monitor station function not available  | SP                    |
|   | AJ71T32-S3<br><br>300mA                 | A1SJ71PT<br>32-S3<br><br>350mA | △            | 1) Monitor station function not available<br>2) Since internal current consumption increases by combination with the A1ADP-SP, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)). | SP                    |
|   | AJ71T32-S4<br><br>300mA                 | None                           | ×            | Changing the system from MELSECNET/MINI-S3 to CC-Link is recommended.   | Not used              |
|   |   |                                |              |   |                       |
| MELSEC<br>-I/OLINK<br>master<br>module        | AJ51T64<br><br>115mA                    | A1SJ51T64<br><br>115mA         | ○            | No restrictions   | SP                    |

| Product                                    | Related model<br>for<br>discontinuation  | Transition to the AnS series  |              |   |                       |
|--|--|---|--------------|---|-----------------------|
|  | A series<br>model                        | AnS series<br>model   | Restrictions |   | Applicable<br>adapter |
| JEMANET<br>(OPCN-1)<br>interface<br>module | AJ71J92-S3<br><br>500mA                  | A1SJ71J92<br>-S3<br><br>400mA   | ○            | No restrictions   | SP                    |
| B/NET<br>interface<br>module               | AJ71B62-S3<br><br>170mA                  | A1SJ71B6<br>2-S3<br>80mA  | ○            | No restrictions   | SP                    |
| Terminal<br>interface<br>module            | AJ71C21-S1<br><br>900mA                  | None  | ×            | No alternative model  | Not used              |
| Multidrop<br>link module                   | AJ71C22-S1<br><br><br><br><br><br>1400mA | A1SJ71UC<br>24-R4<br><br><br><br><br>100mA  | △            | The following functions are different.<br>1) Buffer memory<br>Work area: 61h to 07FF→71h to 0DFFh<br>2) LED<br>For slave station I/O monitor display:<br>Available→None<br>3) Setting switch<br>Baud rate setting:<br>Fixed to 38400bps→Settable to<br>19200/38400<br>Master/local: Fixed to master→Settable<br>4) Terminal block screw<br>M4→M3.5<br>5) Terminal resistor<br>Built-in→externally connected | SP                    |
| Host<br>controller<br>high-speed<br>link   | AJ71C23-S3<br><br>1500mA                 | None  | ×            | No alternative model  | Not used              |
| Computer<br>link module                    | AJ71UC24<br><br><br><br><br>300mA        | A1SJ71UC<br>24-PRF*1<br>100mA<br><br>A1SJ71UC<br>24-R2*1<br>100mA<br><br>A1SJ71UC<br>24-R4*1<br>100mA | △            | 1) Either the RS-232 connector or<br>RS-422/485 terminal block<br>A1SJ71UC24-PRF/R2/R4 is available.<br>2) For the A1SJ71UC24-PRF/R2/R4, the<br>linked operation function between the<br>RS-232 and RS-422 is not available.<br>3) Number of RS-232 connector pins<br>25-pin→9-pin  | SP                    |
|  | AJ71C24-S1<br>1400mA                     | None  | ×            | No alternative model  | Not used              |
|  | AJ71C24-S7<br>1400mA                     | None  | ×            | No alternative model  | Not used              |

| Product                                 | Related model<br>for<br>discontinuation | Transition to the AnS series                                       |              |   |                       |
|---|---|--|--------------|---|-----------------------|
|   | A series<br>model                       | AnS series<br>model  | Restrictions |   | Applicable<br>adapter |
| MODBUS<br>module                        | AJ71UC24-S2<br><br>1400mA               | A1SJ71UC<br>24-R2-S2<br>100mA<br><br>A1SJ71UC<br>24-R4-S2<br>100mA | △            | Either RS-232 or RS-422/485 interface is available.<br>For AnS series, the linked operation between the RS-232 and RS-422 is not available.<br>RS-232 connector: 25-pin→9-pin | SP                    |
| Profibus-<br>DP<br>interface<br>module  | AJ71PB92D<br><br>540mA                  | A1SJ71PB<br>92D<br><br>560mA                                       | ○            | Since internal current consumption increases by combination with the A1ADP-SP, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)).     | SP                    |
|   |   | A1SJ71PB<br>93D<br><br>360mA                                       | ○            | No restrictions   | SP                    |
| Profibus-<br>FMS<br>Interface<br>module | AJ71PB96F<br><br>540mA                  | A1SJ71PB<br>96F<br><br>560mA                                       | ○            | Since internal current consumption increases by combination with the A1ADP-SP, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)).     | SP                    |
| Device Net<br>master<br>module          | AJ71DN91<br><br>240mA                   | A1SJ71DN<br>91<br>240mA  | ○            | No restrictions   | SP                    |
| Supersonic<br>linear scale<br>module    | A64BTL<br><br>1050mA                    | None   | ×            | No alternative model  | Not used              |
| External<br>error check<br>module       | AD51FD-S3<br><br>1000mA                 | None   | ×            | No alternative model  | Not used              |
| PC fault<br>detection<br>module         | AS91<br><br>80mA                        | A1SS91<br><br>80mA   | ○            | No restrictions   | SP                    |
| Vision<br>sensor<br>module              | AS25VS<br><br>2620mA                    | None   | ×            | Connecting a commercially available vision sensor and programmable controller with RS232, Ethernet or Digital I/O for data loading is recommended.                            | Not used              |
|   | AS50VS<br><br>3300mA                    | None   | ×            | Connecting a commercially available vision sensor and programmable controller with RS232, Ethernet or Digital I/O for data loading is recommended.                            | Not used              |

\*1: When the AnACPU communicates in nonprocedural mode using the dedicated instructions (PR/PRN/INPUT), turn on the transmission specification setting switch (SW03) on the module of software version X or later.

If the software version of the module is W or earlier, use the FROM/TO instructions for communication.

There are no restrictions when the AnACPU communicates in nonprocedural mode using the FROM/TO instructions or the used CPU module is except the AnACPU.

### 8.3 List of Transition from the QnA Series to AnS Series

| Product                                | Related model<br>for<br>discontinuation | Transition to the AnS series |              |   |                       |
|--|---|------------------------------|--------------|---|-----------------------|
|  | QnA series<br>model                     | AnS series<br>model          | Restrictions |   | Applicable<br>adapter |
| Ethernet<br>module                     | AJ71QE71N-B2<br>560mA                   | A1SJ71Q<br>E71N-B2<br>530mA  | ○            | No restrictions   | SP                    |
|  | AJ71QE71N-B5<br>400mA                   | A1SJ71Q<br>E71N-B5<br>400mA  | ○            | No restrictions   | SP                    |
|  | AJ71QE71N-T<br>400mA                    | A1SJ71Q<br>E71N3-T<br>530mA  | ○            | Since internal current consumption increases by combination with the A1ADP-SP, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)). | SP                    |
|  | AJ71QE71N3-T<br>530mA                   | A1SJ71Q<br>E71N3-T<br>530mA  | ○            | No restrictions   | SP                    |
|  |   |                              |              |   |                       |
| Serial<br>communi-<br>cation<br>module | AJ71QC24N<br>400mA                      | A1SJ71Q<br>C24N<br>350mA     | △            | RS-232 connector: 25-pin→9-pin  | SP                    |
|  | AJ71QC24N-R2<br>300mA                   | A1SJ71Q<br>C24N-R2<br>300mA  | △            | RS-232 connector: 25-pin→9-pin  | SP                    |
|  | AJ71QC24N-R4<br>600mA                   | A1SJ71Q<br>C24N<br>350mA     | △            | For Q2AS series, use A1SJ71QC24N and connect the RS232-422 converter to 1ch.  | SP                    |
| CC-Link<br>master/<br>local<br>module  | AJ61QBT11<br>450mA                      | A1SJ61Q<br>BT11<br>100mA     | ○            | No restrictions   | SP                    |
|  |   |                              |              |   |                       |

## 8.4 List of Transition from the Q4AR Series to AnS Series

| Product                     | Related model for discontinuation | Transition to the AnS series |              |   |                    |
|-----------------------------|-----------------------------------|------------------------------|--------------|---|--------------------|
|                             | Q4AR series model                 | AnS series model             | Restrictions |   | Applicable adapter |
| Ethernet module             | AJ71QE71N-B2<br>560mA             | A1SJ71QE71N-B2<br>530mA      | ○            | No restrictions   | SP                 |
|                             | AJ71QE71N-B5<br>400mA             | A1SJ71QE71N-B5<br>400mA      | ○            | No restrictions   | SP                 |
|                             | AJ71QE71N-T<br>400mA              | A1SJ71QE71N3-T<br>530mA      | ○            | Since internal current consumption increases by combination with the A1ADP-SP, checking power capacity and receiving end voltage is required (Refer to POINT (1) to (3)). | SP                 |
|                             | AJ71QE71N3-T<br>530mA             | A1SJ71QE71N3-T<br>530mA      | ○            | No restrictions   | SP                 |
|                             |                                   |                              |              |   |                    |
| Serial communication module | AJ71QC24N<br>400mA                | A1SJ71QC24N<br>350mA         | △            | RS-232 connector: 25-pin→9-pin  | SP                 |
|                             | AJ71QC24N-R2<br>300mA             | A1SJ71QC24N-R2<br>300mA      | △            | RS-232 connector: 25-pin→9-pin  | SP                 |
|                             | AJ71QC24N-R4<br>600mA             | A1SJ71QC24N<br>350mA         | △            | For Q2AS series, use A1SJ71QC24N and connect the RS232-422 converter to 1ch.  | SP                 |





## Warranty

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- Before using the product for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi.
- This product has been manufactured under strict quality control. However, when installing the product where major accidents or losses could occur if the product fails, install appropriate backup or failsafe functions in the system.

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